

2017 Friendship Comprehensive Plan  
approved by a vote of the Town of Friendship  
March 20<sup>th</sup>, 2017

attested Joel Fearn  
Town Clerk  
Friendship, Maine

# **2017 Friendship Comprehensive Plan**

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- 13. Population and Demographics**
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## MID - COAST

REGIONAL PLANNING COMMISSION

166 SOUTH MAIN STREET, SUITE 201 ~ ROCKLAND, ME 04841

(207) 594-2299 [www.midcoastplanning.org](http://www.midcoastplanning.org)

### What a Comprehensive Plan is and isn't:

- A comprehensive plan is the collective thoughts of the community as expressed in town wide surveys and meetings with residents and business owners. The plan describes the community and is an expression of the town's vision for its future.
- A comprehensive plan is an official public document, accepted by the State and adopted by municipal government (voters) as a **guide of recommendations** for the future development of the town.
- The comprehensive plan is not an ordinance. **The plan does not enact any regulations or restrictions.** The plan is the legal basis or foundation for all local ordinances. All proposed ordinances have to be voted on by townspeople at future town meetings before they can be adopted.
- The plan is not forever or "cast in stone." It will be necessary to periodically review the plan to ensure that it continues to reflect the conditions and desires of the community. Often this is done every ten years.
- The plan contains three components:
  1. A description of the town for the past, present and future that includes population, economy, public facilities, public services and natural resources, etc.,
  2. Policies or Goals, statements about where the town wants to be in the future; and
  3. Strategies, how the town may achieve these goals

### The Chapters of a Comprehensive Plan

- |  |                                    |
|--|------------------------------------|
| 1. Executive Summary                   | 11. Economy                        |
| 2. Vision Statement                    | 12. Housing                        |
| 3. Public Participation Summary        | 13. Recreation                     |
| 4. Regional Coordination               | 14. Transportation                 |
| 5. History and Archeological Resources | 15. Public Facilities and Services |
| 6. Water Resources                     | 16. Fiscal Capacity                |
| 7. Natural Resources                   | 17. Capital Investment Plan        |
| 8. Agricultural and Forest Resources   | 18. Existing Land Use              |
| 9. Marine Resources                    | 19. Future Land Use Plan           |
| 10. Population and Demographics        |                                    |

## Executive Summary

A Comprehensive Plan presents a vision for the future, with long-range goals and objectives for all activities that affect a municipality. This includes guidance on how to make decisions on public and private land development proposals, that is, setting up the tenets for land use ordinances and zoning, as well as the expenditure of public funds, availability of tax policy (tax incentives if applicable), cooperative efforts and issues of pressing concern.

The Friendship Comprehensive Plan (the Plan) provides a “snapshot” of available data of who we are, where we live, what is important to us, and how we use our land, then we analyzed the information, and obtained public involvement. The ultimate goal of the plan is to implement a set of strategies stemming from the goals and objectives outlined in the Plan. Through public dialogue, residents express a collective vision for the future.

Though the Comprehensive Plan is a state mandate, the Friendship Plan is specific to our town, recognizing what is important to the community. The survey received many responses, thus we have ample input to ensure the goals are in keeping with the community needs. The Plan is set apart by chapters on specific subjects; but the use of the Plan is to connect the data to create a cohesive set of strategies. The Plan establishes actions, operations and capital investments for the next 10 years.

In reviewing the Plan, Friendship is very fortunate to have a low poverty rate and a median income higher than other parts in the area. The town, however, does not have ample rental housing. This may become an issue as the economy is shifting to a tourist-based economy (due to the rise in lodging and seasonal rentals.) A rise in seasonal rentals also impinges upon the year-round rental availability and affordability.

Friendship will focus the growth in the village area, paying attention to possible growth in the corridors. Protection of the forested and agricultural land for natural resource usage may be increased through public education of tax benefits, and the market rise in the Maine market for local farms. This will help the town contain the growth to the village area.

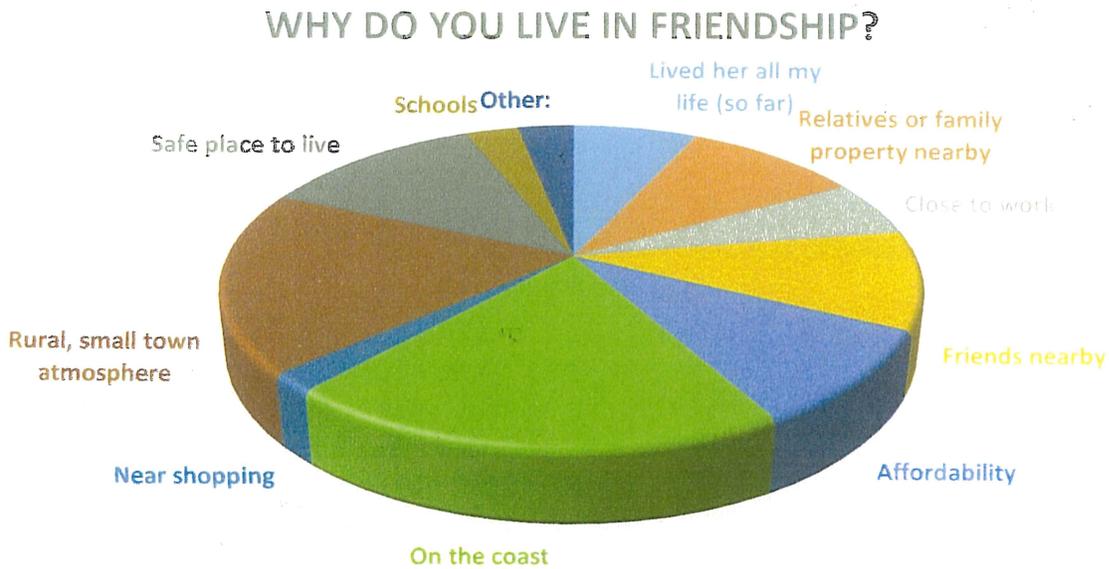
Zoning has done well with protecting the working waterfront. Zoning can also allow for denser village development for the growth area. The town will continue allowances for home based businesses, given almost a third of those employed work for themselves. The formation of an economic development committee will work on these conditions and look to future jobs in the growing service sector.

The Plan was prepared through the work of the Friendship Planning Board as well as staff at the Mid-Coast Regional Planning Commission.

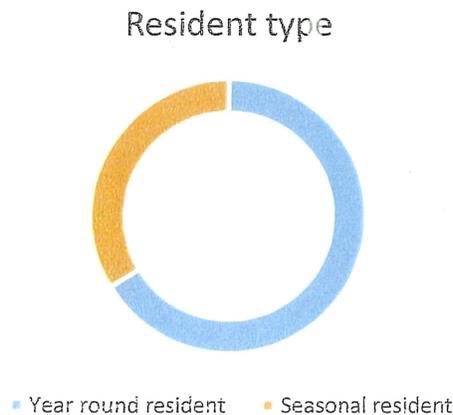
## Visioning and Public Outreach/Response

During the fall of 2016, members of the Planning Board circulated a survey to Friendship residents. The surveys were sent by mail and returned the same or by hand.

To determine the town's vision for the future, it is important to obtain an understanding of why people live in the community now. Dominant in this response was the town's location near the coast and that there is a rural, small town atmosphere. Affordability and safety, along with community were also important points.



The volunteers were able to obtain feedback from both year-round residents and seasonal residents as shown in the diagram below. The average seasonal resident of those responding stays for about 4 months.



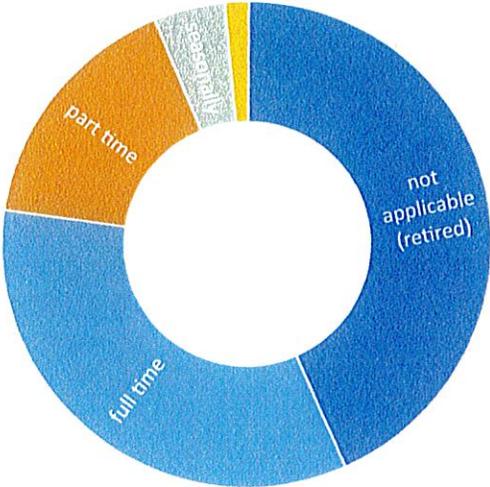
The survey respondent sample mirrors the population at-large. 48% of Friendship residents are aged 55 and over; thus the employment status aligns with the population, giving credibility to the survey.

### Employment Status

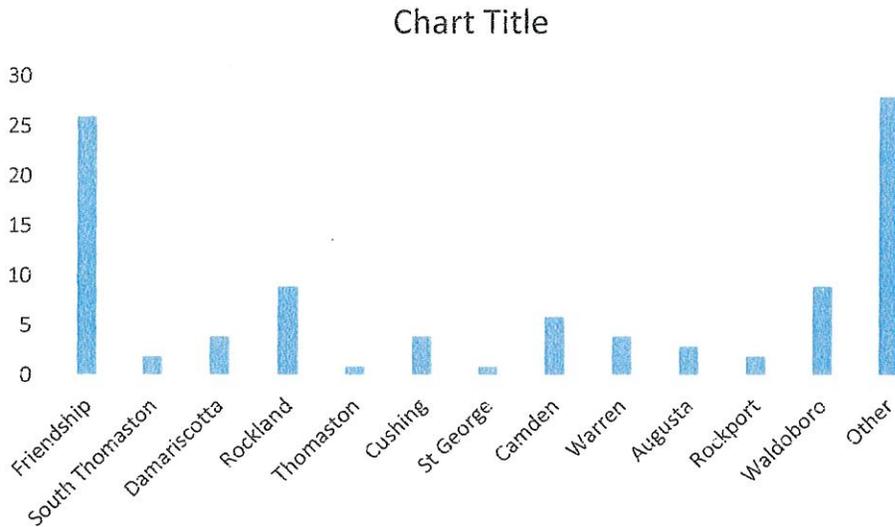
- working for a private employer
- working for the public sector
- self-employed
- unemployed
- retired



### Work Status



Where survey respondents work also is close to the data in the Economy Chapter, as 40% of Friendship residents work in Friendship, further adding to the integrity of the sample used for the survey.



## What we learned from the survey

(Please note a sample survey is attached – received surveys and their tabulation information is available for inspection in the Friendship Town Office during business hours)

Dominant elements of preserving the Town's Character were:

- ✚ Working Waterfront
- ✚ Coastlines in general
- ✚ Rural Character

With Scenic Vistas and resources, village school and wildlife right behind as priorities.

In order to protect these characteristics, conservations easements and use of tax breaks were most identified as methods for the town to employ. Ordinance work and fundraising were also favored as options.

Generally, respondents were happy with services in the community, or had not used or needed such services to respond. Leading in importance for services was ambulance and fire protection/response services. Road maintenance, the town offices and government were also prevailing in the survey as well as in hand-written responses. The addition of more sidewalks, trails and bicycle lanes/paths was also discussed by survey respondents. Other notable services discussed included snow plowing, the town's harbor, police, library and schools.

Comments in services included a concern with limited service for emergency services, the lack of a medical doctor, increasing the water service, and employing more local police. Increasing access to internet/broadband was also noted by respondents. Public access to the waterfront was also commented upon heavily in the survey.

Encouraging the next generation into public and civil services was also expressed as a goal. Elderly care was also notable in comments; specifically providing in-home care options as well as convenient elderly housing.

The waterfront generally is the leading element to the town that is both most favorable but is also a topic for concern in the future. Comments regarding garbage in the water were riddled through survey responses, as well providing preferential parking for local residents and fishermen on the dock parking lots. Preserving the working waterfront is a key piece to respondent's concerns for the future.

It is expected by town residents that new residential growth would be in the form of single-family development; however, concerns are distinguished regarding new subdivision development in the future. There appears to be division amongst survey respondents regarding the need or the desire for affordable housing. Respondents appeared to understand the need for ordinances but great uncertainty exists at their effectiveness or desirability. Many respondents indicated they were not familiar with existing ordinances.

One ordinance that was often mentioned in the survey was re-evaluating the fireworks ordinance. There appears to be issues with the use late at night in particular. General noise was also expressed as a concern. Maintenance of the dark skies was also mentioned in many surveys. Viewshed management of the waterfront was also cited as well as property maintenance and unsafe buildings.

Almost all respondents indicated they want to attract more business. Business types include uses commonly found in village downtowns as retail, restaurant, hardware store and offices, as well as the arts. One notable comment was to create a gazebo with summer concerts.

As to environmental resources, responses were almost equal on all choices; however septic/sewage disposal, the use of pesticides/fertilizers, and air pollution were the top 3. The effects to waterfront use, access and employment from sea level rise and climate change was also mentioned by many survey respondents. Threats from oil spills and garbage in the harbor are also notable.

Another principal comment made by many respondents surrounds the use of illegal drugs in Friendship. This concern also was parallel to comments made about the school system.

In general, in terms of growth and development, survey responders want new businesses but do not want to grow too big. Preserving the small town character was essential in balancing with new development.

### **What can we do with this information?**

It appears more of a downtown village business atmosphere is desired. The town can work with the chamber and reach out to economic development organizations to market the town for the types of desired businesses. The town may also want to consider funding a market study for their area as a way to provide market data for businesses considering Friendship.

Capital planning also is a manner to implement the vision. For example, placing public bathrooms in the future at Walker Beach is a possible planning project.

Grant pursuit to implement these visions for the future is also a planning tool. For example, access to the waterfront is a common comment in the survey responses; there are grants available to perform deed research to determine where all rights of ways to the water are located.

Ordinance work was also mentioned; however, the town's Planning Board and its Chief Elected Officials should educate the residents of existing ordinances, and in general, the advantages, hindrances, and limitations of ordinances in general. Ordinances for noise, lighting, garbage, waterfront views, garbage disposal, pesticide use/fertilizers (in shoreland or noted watersheds,) as well as open discussions on the fireworks ordinance.

Town operational budgets should also be analyzed to determine what services the town should either supply, or, provide some financial support a non-profit to provide such services. Regional cooperation and sharing of services can also be reviewed as an option.

## **Vision**

*Friendship will continue to provide a wonderful sense of a small town, a working coastal town, replete with small shops and restaurants to serve residents and visitors alike. The quiet peace will continue for those relaxing by the waterfront or walking in open spaces and neighborhoods. Village services as the library, the school, and the museum will continue to grow, allowing for recreational activity for young families and their children, right along with active retirees and the elderly. Services to residents will be balanced to keep living in Friendship affordable and attractive, but also safe and dynamic.*

# **NOTICE OF A PUBLIC HEARING**

## **Comprehensive Plan**

### **Friendship Planning Board**

**April 12, 2017**

**7 PM**

#### **Town Offices**

**Pursuant to Maine Revised Statutes Title 30-A Part 2 Subpart 6-A Chapter 187 Subchapter 2 Section 4324 Paragraph 8, the Friendship Planning Board will hold a public hearing on the draft Comprehensive Plan for the Town of Friendship. The purpose of this hearing is to receive and consider comments from the public on the proposed plan. The Comprehensive Plan is available for public inspection at the Town Hall in Friendship. Questions or comments prior to the hearing can be directed to the Planning Board.**

*The Town of Friendship strives to ensure our meetings are accessible to all. Please alert us if you require special services to participate in meetings.*

*This notice was posted in the Municipal Office on March 14, 2017 and will be published in the newspaper for publication dates of March 23, 2017 and March 30, 2017.*

## AGRICULTURAL AND FORESTRY RESOURCES

### Introduction

Friendship has a very small agricultural base. Most farms have returned to forests or fallow fields over the years. However, a few small farms are active currently growing blueberries and vegetables, raising poultry, sheep and goats. The higher value of organic, heirloom and similar niche farming could increase future agricultural activity in the Town. Much of Friendship is forested. Limited timber harvesting occurs on a regular basis and is likely to continue. This chapter outlines existing resources and offers strategies to enhance agriculture and suitable forestry activities.

### Goal

*To safeguard the State's agricultural and forest resources from development which threatens those resources.*

### Analyses

*1. How important is agriculture and/or forestry and are these activities growing, stable, or declining?*

The Town recognizes the benefits of its forests and farmland although many farms have become inactive over the past several decades. Fields and forests comprise much of the physical rural character of Friendship. They provide open spaces, scenic beauty, wildlife habitat, and recreation. They can also improve surrounding residential property values.

Most of the land that is not developed within the Town is forested or wetlands. Many former fields have returned to forests. These forested areas assist in the recharging of groundwater and should be viewed as resources to be protected. They have significant wildlife habitat. See the map titled Land Cover for areas of forests (about 6,314.3 acres), wetlands/wetland forests (about 1,160.1 acres), grasslands (about 513.8 acres), and cultivated lands (about 263.5 acres) among other categories.

There are areas in the Town with farmland soils as shown on the state-prepared map titled Farmland Soils: Prime and of Statewide Importance. Prime farmland is the land that is best suited to producing food and feed crops. It has the soil quality and moisture supply needed to produce a sustained high yield of crops. Prime farmland is a limited natural resource as no more of it is being created. Commercial farms located in Friendship include the Sea Breeze Farm on Route 97. It sells vegetables, eggs, and goat and sheep products.

*2. Is the community currently taking regulatory and/or non-regulatory steps to protect productive farming and forestry lands? Are there local or regional land trusts actively working to protect farms or forest lands in the community?*

Agricultural and forestry uses are not regulated in the Land Use Ordinance. Agriculture uses, forest management and timber harvesting are allowed town-wide including the shoreland zone, with some limitations. The Site Plan Review Ordinance amended in 2005 does not apply to agricultural activities, agricultural buildings and structures, and timber harvesting and forest management activities.

There are a few active Friendship farms. The Town would welcome their future support to local residents who wish to engage in farming.

*3. Are farm and commercial forest landowners taking advantage of the State's current tax law?*

Farmland is eligible for the Farmland Current Use Tax Program (Title 36, M.R.S.A., Section 1101, et seq.) if that farm consists of at least five contiguous acres, is utilized for the production of farming, agriculture or horticulture activities, which now can include woodland and wasteland in its calculation. The tract must contribute gross earnings from farming activities of at least \$2,000 (which may include the value of commodities produced for consumption by the farm household) during one of the last two years or three of the last five years. Friendship has 2 parcels of farmland enrolled in this program (23 acres cropland, 2.7 acres woodland). Since 2000, no parcels were added in the Farmland Program; no parcels were withdrawn.

The Maine legislature enacted changes to the Tree Growth and Open Space Property tax programs which took effect August 1, 2012 as Public Law Chapter 618 (LD 1138) which provides for tax advantages as under the old statute 36 MRSA Section 574. Those looking for tax reductions for forest-managed land should consider these programs. Friendship has 1,502.53 acres of land enrolled in the Tree Growth Program as of 2013, consisting of 41 parcels. Since 2000, 18 parcels were added in the Tree Growth Program, 3 parcels were withdrawn.

The Open Space Current Use Tax Program has no minimum lot size requirements and the parcel must be preserved or restricted in use to provide a public benefit by conserving scenic resources; enhancing public recreational opportunities; promoting game management or preserving wildlife habitat. Friendship has 366.46 acres of open space enrolled in this program, consisting of 15 parcels. This statute has been revised in August 2012 to also include areas in forest management and should be considered by those looking for tax reductions. Since 2000, 7 parcels were added in the Open Space Program; no parcels were withdrawn.

*4. Has proximity of new homes or other incompatible uses affected normal operations of farms or woodlot owners?*

This is not apparent currently as there is very little farming activity and a limited amount of woodlot activity. Previously, some herding and grazing had occurred within the shoreland zone, and so a concern for pollution to shellfish areas was addressed by the relocation of the farm animals.

*5. Are there large tracts of industrial forest land that have been or may be sold for development in the foreseeable future; if so, what impact would that have on the community?*

Friendship does not have large tracts of industrial forestland, but large-scale development inland would have an impact on forestland wildlife habitat; and, although regulated by land use ordinances, might also have an impact on groundwater.

Care should be taken in any application for a subdivision to maintain as much forestland as possible for both groundwater recharge and for the preservation of habitat. Proper forest management should be encouraged. Loss of forestland can be attributed to development and to irresponsible harvesting techniques. When forestland is fragmented, both public and wildlife access become more restricted. Fragmentation occurs with the construction of new roadways and development in areas with large blocks of forests. Accordingly, in these areas road construction and development proposals should be reviewed very carefully and where appropriate redirected to areas better suited for such development and for the maintenance of forestlands. The Town should take special care in forested areas including the interior area between Routes 97 and 220.

*6. Does the community support community forestry or agriculture (i.e. small woodlots, community forests, tree farms, community gardens, farmers' markets, or community-supported agriculture)? If so, how?*

The Town has been supportive of the limited agricultural activity occurring. Friendship has not limited farms and farm stands. It has supported forest management, which has been controlled on the State level. There is sufficient area for home gardening and small-scale, niche farming, so there is no immediate need for community gardens. Neighboring Waldoboro hosts a regional farmers' market, as does Warren.

*7. Does the community have town or public woodlands under management, or that would benefit from forest management?*

There are no community or public woodlands.

## Conditions and Trends

1. The community's Comprehensive Planning Agriculture and Forestry Data Set prepared and provided to the community by the Department of Agriculture, the Maine Forest Service, and the Office, or their designees.

The data set has been incorporated into this chapter and the maps titled Farmland Soils: Prime and of Statewide Importance, and Land Cover. See the next table for timber harvest data in Friendship for the years 1991 to 2013 as reported by the Maine Forest Service.

Summary of Timber Harvest Information for Friendship						
Year	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres	Number of active Notifications
1991-1992	112	10	3	125	0	5
1993	142	35	0	177	0	7
1994	40	74	7	121	0	5
1995	176	5	1	182	0	10
1996	90	120	16	226	0	8
1997	75	15	50	140	5	7
1998	84	16	0	100	1	8
1999	85	0	0	85	3	9
2000	53	4	0	57	0	5
2001	33	0	0	33	0	3
2002	168	0	0	168	0	6
2003	165	0	0	165	0	3
2004	130	0	0	130	0	5
2005	48	0	0	48	0	3
2006	64	0	0	64	0	4
2007	148	0	0	148	0	4
2008-2010	204	0	0	204	0	6
2011	45	0	0	45	0	3
2012	66	10	0	76	0	4
2013	55	0	0	55	0	6

Source: Department of Conservation - Maine Forest Service, provided in 2014

Notes: Data compiled from Confidential Year End Landowner Reports to Maine Forest Service.  
To protect confidential landowner information, data is reported only where three or more landowner reports reported harvesting in the Town.

Town level agricultural data is not available from the Census of Agriculture by the USDA. County level data for 1997, 2007 and 2012 is shown in the next table. The number of farms and acreage has increased modestly. By acreage, the top products include forage (hay) and vegetables. In Friendship, vegetables are a primary crop.

<b>Knox County Farm Stats</b>			
<b>Category</b>	<b>1997</b>	<b>2007</b>	<b>2012</b>
Number of farms	275	304	314
Total land in farms (acres)	28,581	30,100	29,407
Average size of farms (acres)	104	99	94
Median size of farms (acres)	70	40	44
Estimated market value of land and buildings:			
Average per farm	278,992	382,856	355,739
Average per acre	2,833	3,867	3,798
Total cropland (acres)	12,164	12,050	7,510
Market value of crops, including nursery and greenhouse crops	\$5,046,000	\$6,175,000	\$5,431,000
Forage - land used for all hay and all haylage, grass silage, and greenchop (acres)	6,405	7,580	4,205
Vegetables harvested for sale (acres)	329	282	312

Source: Census of Agriculture USDA, 1997, 2002 and 2012 (Issued May 2014)

*2. A map and/or description of the community's farms, farmland, and managed forest lands and a brief description of any that are under threat.*

As noted, the Town has few agricultural operations. Most forests are not managed for timber harvesting. See the map titled Land Cover for areas of forests (about 6,314.3 acres), wetlands/wetland forests (about 1,160.1 acres), grasslands (about 513.8 acres), and cultivated lands (about 263.5 acres) among other categories.

Land in the shoreland is subject to both development pressure and the Shoreland Zone provisions that seek to protect vegetation near waterbodies. Threats to lands suitable for farming and forestlands are low given the limited amount of development seen in the recent period.

3. Information on the number of parcels and acres of farmland, tree growth, and open space enrolled in the state's farm, tree growth, and open space law taxation programs, including changes in enrollment over the past 10 years.

Friendship has 25.7 acres of land enrolled in the Farmland Program as of 2013 (23 acres cropland, 2.7 acres woodland). Since 2000, there have been --- parcels added to or withdrawn from the Farmland Program.

Summary of Farmland Program Information for Friendship								
Year	# of Parcels	Acres			Cropland Valuation	Woodland Valuation	Acres Withdraw	Penalties Assessed
		First Classified	Cropland	Woodland				
2013	2	0.00	23.00	2.7	\$9,000	\$713	0	\$0
2015	2		23		9000			

Source: Maine Revenue Services, provided in 2014

Friendship has 1,502.53 acres of land enrolled in the Tree Growth Program as of 2013, consisting of 41 parcels. Since 2000, --- parcels were added in the Tree Growth Program, including ---; no parcels were withdrawn.

Summary of Tree Growth Information for Friendship								
Year	# of Parcels	Acres				Tree Growth Total Value	Acres Withdraw	Penalties Assessed
		Soft Wood	Mixed Wood	Hard Wood	Tree Growth Total			
2013	41	497.56	809.78	195.19	1,502.53	\$413,432	0.00	\$0
2015	39				1491.13	415,888		

Source: Maine Revenue Services, provided in 2014

Friendship has 366.46 acres of open space enrolled in this program, consisting of 15 parcels. This statute has been revised in August 2012 to also include areas in forest management. Since 2000, ---- parcels were added in the Open Space Program; --- parcels were withdrawn.

Summary of Open Space Program Information for Friendship						
Year	# of Parcels	Acres		Total Valuation	Acres Withdraw	Penalties Assessed
		First Classified	Total			
2013	15	0.00	366.46	\$1,782,100	0	\$0
2015	15		366.46	1,782,100		

Source: Maine Revenue Services, provided in 2014

4. A description of any community farming and forestry activities (e.g. community garden, farmer's market, or community forest).

The Town does not currently have a farmers' market. There are private farm stands seasonally. Neighboring Waldoboro has a regional farmers' market: June through September. Warren also has a farmer's market. Friendship has no community gardens or community forests.

**Policies**

1. *To safeguard lands identified as prime farmland or capable of supporting commercial forestry.*
2. *To support farming and forestry and encourage their economic viability.*
3. *To promote the use of best management practices for timber harvesting and agricultural production.*

**Strategies**

<b>Agricultural and Forestry Resources: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<i>(1) Consult with the Maine Forest Service district forester when developing any land use regulations pertaining to forest management practices as required by 12 M.R.S.A. §8869.</i>	Planning Board and Code Enforcement Officer	Immediate and Ongoing
<i>(2) Consult with Soil and Water Conservation District staff when developing any land use regulations pertaining to agricultural management practices.</i>	Planning Board and Code Enforcement Officer	Immediate and Ongoing
<i>(3) Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable.</i> <ul style="list-style-type: none"> <li>• <i>To preserve open spaces, forestland, and farm fields, the Town and should consult with Maine Forest Service District Forester and Soil and Water Conservation District staff when developing these regulations.</i></li> </ul>	Selectmen, Planning Board, Ordinance Review Committee, Code Enforcement Officer, and Town Meeting Vote	Immediate
<i>(4) Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.</i>	Selectmen, Planning Board, Ordinance Review Committee, Code Enforcement Officer, and Town Meeting Vote	Midterm

Agricultural and Forestry Resources: Strategies	Responsible Parties	Timeframe
<p>(5) <i>Encourage owners of productive farm and forest land to enroll in the current use taxation programs.</i></p> <ul style="list-style-type: none"> <li>• The Town should put out information concerning the tax advantages of State programs for farming and forestry enterprises and encourage owners of farm and forestland to enroll in current use taxation programs.</li> </ul>	<p>Selectmen, Town Clerk, Planning Board, and Code Enforcement Officer</p>	<p>Immediate and Ongoing</p>
<p>(6) <i>Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your own operations.</i></p>	<p>Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Midterm</p>
<p>(7) <i>Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.</i></p>	<p>Selectmen</p>	<p>Long Term</p>

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# ECONOMY

## Introduction

This chapter describes the local and regional economy, including employment sectors, businesses, employment rates, and retail sales. Recommendations are suggested to improve Friendship's economy.

## State Goal

*Promote an economic climate that increases job opportunities and overall economic well-being.*

## Analyses

- (1) *Is the economy experiencing significant change, and how does this, or might this, affect the local population, employment, and municipal tax base?*

Growth in the local economy has been limited by the slow statewide and national economies. The size of the local labor force has decreased 5.7% since 2000, while wages have modestly increased. The number of Friendship businesses is relatively small. Total unemployment in 2014 was 4.5%, which was lower than recent years, but still higher than the 2000 level of 2.4%. In 2014, Friendship residents earned slightly less on average than other Knox County residents but slightly more than State residents as a whole.

Most Friendship residents who work commute to areas with greater employment opportunities outside of the Town but still within Knox County, especially to Rockland. As described in the Population and Demographics Chapter, the Town's population is aging, with more retirees who are not dependent upon the local economy for their income.

The municipal tax base is generated largely from residential property taxes. The residential housing market decline has put pressure on municipalities to conduct revaluations of properties to reflect reduced sales prices, which could affect municipal property tax revenue collections. Projected reductions in Maine's state revenue sharing funding will increase the Town's reliance on property tax revenues. See the Fiscal Capacity Chapter for more information.

- (2) *Does the community have defined priorities for economic development? Are these priorities reflected in regional economic development plans?*

There are no municipally defined priorities at this time.

- (3) *Is there a traditional downtown or village center(s) in the community? If so, are they deteriorating or thriving?*

Yes, there is a village center. Small businesses are located here and are also spread throughout the Town. Retail activity is focused on Route 97 and Route 220 especially in the village area, which has seen limited new development since 2000.

Most municipal investments have been related to the maintenance of existing roads and buildings. See the Transportation Chapter and Public Facilities Chapter for a description of these efforts.

(4) *Is tourism an important part of the local economy? If so, what steps has the community taken to support this industry?*

As noted in the Population and Demographics Chapter, Friendship has a sizable seasonal population. Tourism is a part of the Town's economy.

Small businesses and individuals have established themselves to meet the needs of retired or seasonal residents; these include construction, painting, landscape care, cleaning, plowing services, electrical, plumbing, security and property management.

To date, the Town has been involved in tourist based activities including hosting events like Friendship Days. See the Recreation Chapter for further discussion.

(5) *Do/should home occupations play a role in the community?*

Some Friendship residents work several jobs over the course of the year. Much of this is seasonal and some of it operates out of homes. There are at least thirty and likely more households who have home occupations. There is generally support for home occupations to continue to be allowed when compatible with surrounding residential uses.

See the Chapters on Housing and Land Use for further discussion of this topic.

(6) *Are there appropriate areas within the community for industrial or commercial development? If so, are performance standards necessary to assure that industrial and commercial development is compatible with the surrounding land uses and landscape?*

There are limited areas suitable for industry. Areas most suitable for light industrial marine related development in Friendship are found around existing such development in shoreland commercial/maritime activity districts. Commercial development is suitable along sections of Route 97 and Route 220, mostly near the village area. Sewer and three-phase power are not readily available in Town. Areas with wetlands, public drinking water wellheads, critical natural habitats, resource protected shoreland, high value farmland soils, and residential neighborhoods are not suitable for industrial or commercial development. See the Future Land Use Plan Chapter for more information on suitable areas and on proposed ordinance performance standards to ensure that new industrial and commercial development does not degrade the quality or value of existing properties.

(7) *Are public facilities, including sewer, water, broadband access or three-phase power, needed to support the projected location, type, and amount of economic activity, and what are the issues involved in providing them?*

The small-scale and traditional type of development sought in Friendship does not necessarily require significant public expenditure for new infrastructure. However, if large-scale development were sought, new infrastructure would be needed.

Most of the Town depends upon well and septic, with the exception of the village area, which is served by the water district. See the Water Resources Chapter for more information. See the Public Facilities Chapter and Existing Land Use Chapter for the limitations that this places on additional development.

Moderately high broadband Internet access via DSL and cable is available large portions of the Town. Telecommuting opportunities will continue to be constrained until greater bandwidth Internet service becomes available.

Three-phase power is not available. No current usage of three-phase power is known and little need for this is anticipated.

Current municipal revenues are not sufficient to upgrade services to subsidize new large-scale development. Large tax increases and/or additional long-term borrowing, a burden that is unlikely to be supported by Town voters, would be needed to make such public improvements. See the Fiscal Capacity Chapter for information on reserve accounts and the Capital Investment Plan.

(8) *If there are local or regional economic development incentives such as TIF districting, do they encourage development in growth areas?*

Not applicable at this time.

(9) *How can/does the community use its unique assets such as recreational opportunities, historic architecture, civic events, etc. for economic growth?*

See the Recreation Chapter for discussion on this topic.

## Conditions and Trends

*Minimum data required to address Analysis:*

- (1) *The community's Comprehensive Planning Economic Data Set prepared and provided to the community by the Office or its designee.*

Since 2000, the Town's labor force decreased by 33 persons. The unemployment rate went from 2.4% in 2000 to 4.5% in 2014. The unemployment rate peaked in 2011, reflecting the economic recession. In 2014, 25 persons in Friendship's labor force were unemployed and looking for work. This was 11 more people than in 2000.

<b>Friendship Employment</b>				
<b>Year</b>	<b>Civilian Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Unemployment Rate</b>
2000	583	569	14	2.4%
2010	526	497	29	5.5%
2011	527	496	31	5.9%
2012	532	505	27	5.1%
2013	543	517	26	4.8%
2014	550	525	25	4.5%
Change #	-33	-44	11	2.1
Change %	-5.7%	-7.7%	78.6%	87.5%

Source: Maine Department of Labor, Center for Workforce Research and Information, 10/2015

Note: Annual Not Seasonally Adjusted Labor Force

Since 2000, Knox County's labor force decreased by 289 persons. The unemployment rate went from 2.8% in 2000 to 5.2% in 2014. In 2014, 1,074 persons in the Knox County labor force were unemployed and looking for work. This was 490 more people than in 2000.

<b>Knox County Employment</b>				
<b>Year</b>	<b>Civilian Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Unemployment Rate</b>
2000	21,024	20,440	584	2.8%
2010	20,377	18,874	1,503	7.4%
2011	20,439	18,938	1,501	7.3%
2012	20,608	19,180	1,428	6.9%
2013	20,844	19,605	1,239	5.9%
2014	20,735	19,661	1,074	5.2%
Change #	-289	-779	490	2.4
Change %	-1.4%	-3.8%	83.9%	85.7%

Source: Maine Department of Labor, Center for Workforce Research and Information, 10/2015

Note: Annual Not Seasonally Adjusted Labor Force

The State labor force grew by 20,764 persons from 2000 to 2014. Those unemployed and looking for work grew by 17,061 persons during the same period. The State unemployment of 5.7% in 2014 was higher than the unemployment rate for Friendship and for Knox County.

<b>Maine Employment</b>				
<b>Year</b>	<b>Civilian Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Unemployment Rate</b>
2000	678,164	655,349	22,815	3.4%
2010	695,182	638,630	56,552	8.1%
2011	699,171	644,091	55,080	7.9%
2012	702,455	650,024	52,431	7.5%
2013	707,188	660,259	46,929	6.6%
2014	698,928	659,052	39,876	5.7%
<b>Change #</b>	<b>20,764</b>	<b>3,703</b>	<b>17,061</b>	<b>2.3</b>
<b>Change %</b>	<b>3.1%</b>	<b>0.6%</b>	<b>74.8%</b>	<b>67.6%</b>

Source: Maine Department of Labor, Center for Workforce Research and Information, 10/2015

Note: Annual Not Seasonally Adjusted Labor Force

According to the Maine Department of Labor, seven net new businesses were located in Friendship from 2004 to 2014, for 42 firms in total, employing about 152 people. Friendship businesses employed 50 fewer people at the end of this period. Reported average weekly wages in Friendship workplaces have increased by \$68 from 2004 to 2014. During this same period, a net of 199 new businesses located in Knox County. Average wages for those who worked in Knox County higher than for those who worked in the Town. These figures do not fully account for sole proprietors, some home based businesses, and the informal economy.

<b>Annual Quarterly Census of Employment And Wages Total All Industries</b>	<b>2004</b>			<b>2014</b>		
	<b>Avg # of Firms</b>	<b>Avg Employ</b>	<b>Avg Weekly Wage</b>	<b>Avg # of Firms</b>	<b>Avg Employ</b>	<b>Avg Weekly Wage</b>
Friendship	35	202	\$505	42	152	\$573
Knox County	1,728	17,995	\$560	1,927	17,000	\$671

Source: Maine Department of Labor

The median household income had been higher for Town residents than for residents of the County and State median in 2000 and 2010. For 2014, the Town median is slightly lower than the County but higher than the State. Generally, Friendship's income earners work outside of the Town, have retirement income, or work for themselves.

<b>Median Household Income</b>	<b>Friendship</b>	<b>Knox County</b>	<b>Maine</b>
<b>2000</b>	\$39,348	\$36,774	\$37,240
<b>2010</b>	\$48,026	\$45,264	\$46,933
<b>2013</b>	\$48,750	\$49,755	\$48,453
<b>2014</b>	\$50,000	\$50,515	\$48,804
<b>Percent Change</b>	27.1%	37.4%	31.1%

Source: U.S. Census, American Community Survey (5-year estimates 2009-2013 and 2010-2014)

<b>Per Capita Income</b>	<b>Friendship</b>	<b>Knox County</b>	<b>Maine</b>
<b>2000</b>	\$20,409	\$19,981	\$19,533
<b>2010</b>	\$23,767	\$25,291	\$25,385
<b>2013</b>	\$25,963	\$27,865	\$26,824
<b>2014</b>	\$26,353	\$28,062	\$27,332
<b>Percent Change</b>	29.1%	40.4%	39.9%

Source: U.S. Census, American Community Survey (5-year estimates 2009-2013 and 2010-2014)

In 2014, 58 people lived below the poverty line in Friendship (5.5% of all individuals). In 2000, 131 people lived below the poverty line (11% of all individuals).

<b>Individuals Below Poverty Level</b>			
<b>Year</b>	<b>Friendship</b>	<b>Knox County</b>	<b>Maine</b>
2000	11.0%	10.1%	10.9%
2010	10.9%	12.5%	12.6%
2013	6.0%	10.8%	13.6%
2014	5.5%	11.3%	13.9%

Source: U.S. Census, American Community Survey (5-year estimates 2006-2010, 2009-2013 and 2010-2014)

<b>Families Below Poverty Level</b>			
<b>Year</b>	<b>Friendship</b>	<b>Knox County</b>	<b>Maine</b>
2000	8.3%	6.4%	7.8%
2010	7.4%	7.9%	8.4%
2013	1.7%	6.5%	9.1%
2014	1.2%	7.2%	9.4%

Source: U.S. Census, American Community Survey (5-year estimates 2009-2013 and 2010-2014)

At 1.2%, the Town's family poverty rate in 2014 was substantially lower than Knox County (7.2%) and the State (9.4%). Poverty rates decreased at the municipal level, and increased at the county level and statewide from 2000 to 2014.

The poverty level in 2014 was \$19,790 for a three-person family. The next table shows federally defined poverty levels by family size.

<b>2014 Poverty Guidelines for the 48 Contiguous States and the District of Columbia</b>	
<b>Persons in family/household</b>	<b>Poverty guideline</b>
1	\$11,670
2	\$15,730
3	\$19,790
4	\$23,850
5	\$27,910
6	\$31,970
7	\$36,030
8	\$40,090
For families/households with more than 8 persons, add \$4,060 for each additional person.	

Source: U.S. Department of Health and Human Services

The two largest occupational sectors in Friendship in 2014 were 'Natural resources, construction, and maintenance' and 'Management, business, science, arts'. The natural resources occupation category includes fishing. Further, the Census-defined industry category 'Agriculture, forestry, fishing and hunting, and mining' employed an estimated 93 persons in Friendship in 2014. For Knox County, the top occupational sectors were 'Management, business, science, arts' and 'Sales and office'. The fastest growing sector for both the Town and the County are 'Service' occupations. The sector decreasing the most was 'Production, transportation, and material moving'.

<b>Occupations</b>	<b>Friendship</b>			<b>Knox County</b>		
	<b>2000</b>	<b>2014</b>	<b>Change</b>	<b>2000</b>	<b>2014</b>	<b>Change</b>
Total civilian employed population 16 years and over	546	495	-9.3%	19,263	19,483	1.1%
Management, business, science, arts	122	121	-0.8%	5,725	6,233	8.9%
Service	73	96	31.5%	2,959	3,470	17.3%
Sales and office	110	105	-4.5%	4,881	4,867	-0.3%
Natural resources, construction, and maintenance	154	133	-13.6%	3,108	3,028	-2.6%
Production, transportation, and material moving	87	40	-54.0%	2,590	1,885	-27.2%

Source: U.S. Census, American Community Survey (5-year estimates 2010-2014)

In Friendship, 63.2% of those who work do so for private sector employers, 8.7% work for the government (city, public schools, county, state or federal), and 27.3% work for themselves in unincorporated businesses. For Knox County as a whole, 71.8% work for private employers, 12.6% work for the government, and 15.3% work for themselves in unincorporated businesses.

Class of Worker 2014	Friendship		Knox County	
	Number	Percent	Number	Percent
Civilian employed population 16 years and older	495	100.0%	19,483	100.0%
Private wage and salary workers	313	63.2%	13,992	71.8%
Government workers	43	8.7%	2,452	12.6%
Self-employed in own not incorporated business workers	135	27.3%	2,981	15.3%
Unpaid family workers	4	0.8%	58	0.3%

Source: U.S. Census, American Community Survey (5-year estimates 2010-2014)

Total taxable retail sales decreased by 22.8% in Friendship from 2010 to 2014. The steepest decline was in the 'Business Operating' sector. The largest growth was seen in 'Other Retail' and 'Lodging'.

Friendship Total Taxable Retail Sales (Annual) in THOUSANDS OF DOLLARS						
Category	2010	2010	2011	2012	2014	Change
Total	2,823.4	3,001.8	1,633.0	1,877.3	2,180.9	-22.8%
Personal	796.8	842.8	872.5	1,092.0	1,017.5	27.7%
Business Op	1,910.0	2,039.7	760.5	785.3	1,163.4	-39.1%
Restaurant	32.6	26.7	25.4	25.4	23.7	-27.3%
Lodging	196.4	231.7	250.6	294.2	284.4	44.8%
Other Retail	32.0	25.7	8.5	18.1	52.2	63.1%

Source: Maine Revenue Services,

Notes: To use these dollar figures, multiply by \$1,000. Some taxable sales are non-disclosable due to the small numbers of businesses in certain sectors.

Knox County recorded an increase of 15.5% in total taxable retail sales from 2010 to 2014. The largest increases were in 'Other Retail' and 'Restaurant'. No sectors recorded a decline.

<b>Knox County Total Taxable Retail Sales (Annual) in THOUSANDS OF DOLLARS</b>						
<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Change</b>
Total	470,126.0	482,574.2	492,211.6	518,998.6	542,912.2	15.5%
Personal	412,866.9	420,906.5	438,175.2	462,748.4	483,564.9	17.1%
Business Op	57,259.1	61,667.7	54,036.4	56,250.2	59,347.3	3.6%
Building	79,446.9	80,857.6	84,770.1	87,474.4	88,498.9	11.4%
Food Store	51,271.1	51,148.9	53,412.8	54,345.0	54,990.4	7.3%
General	74,467.8	74,050.1	75,310.4	77,902.7	86,458.2	16.1%
Other Retail	64,156.1	67,474.4	68,168.2	78,853.6	85,034.2	32.5%
Auto Trans	62,320.3	65,191.8	69,284.6	73,229.1	75,231.4	20.7%
Restaurant	29,265.2	31,207.9	34,936.6	36,714.7	38,758.8	32.4%
Lodging	51,939.5	50,975.8	52,292.5	54,228.9	54,593.0	5.1%

Source: Maine Revenue Services, Note: To use these dollar figures, multiply by \$1,000.

Maine Revenue Services category descriptions:

- Total Retail Sales: Includes Consumer Retail Sales plus special types of sales and rentals to businesses where the tax is paid directly by the buyer (such as commercial or industrial oil purchase).
- Business Operating: Purchases for which businesses pay Use Tax, i.e., for items that are used by the business in its operation (like shelving and machinery) and not re-sold to consumers.
- Building Supply: Durable equipment sales, contractors' sales, hardware stores and lumberyards.
- Food Stores: All food stores from large supermarkets to small corner food stores. The values here are snacks and non-food items only, since most food intended for home consumption is not taxed.
- General Merchandise: In this sales group are stores carrying lines generally carried in large department stores. These include clothing, furniture, shoes, radio-TV, household durable goods, home furnishing, etc.
- Other Retail: This group includes a wide selection of taxable sales not covered elsewhere. Examples are dry good stores, drug stores, jewelry stores, sporting good stores, antique dealers, morticians, bookstores, photo supply stores, gift shops, etc.
- Auto Transportation: This sales group includes all transportation related retail outlets. Included are auto dealers, auto parts, aircraft dealers, motorboat dealers, automobile rental, etc.
- Restaurant/Lodging: All stores selling prepared food for immediate consumption. The Lodging group includes only rental tax.

- (2) *A brief historical perspective on how and why the current economy of the community and region developed.*

Friendship began as a community of fishermen, boat builders, and farmers. Over the last fifty years, a good portion of that farming ceased, although farming does continue on a small scale. Fishing continues to remain important for the local economy. See the Marine Resources Chapter. The Town, which had once been significantly cleared for agriculture has since reverted to forest and rural residential uses in most areas.

The growth of manufacturing, which had employed many in the workforce for generations, occurred principally in larger communities like Rockland and Waldoboro. Coastal communities had a variety of marine-based businesses, some of which continue to this day. Improvement in the roadway networks, especially during the second half of the twentieth century, allowed more people to live farther from their workplaces in search of less expensive land and housing. Service sector employment (both public and private, and in low, moderate and high wage occupations) has surpassed manufacturing over the past four decades. Commuting has sustained predominantly residential towns like Friendship. However, there are important businesses located in the Town that provide needed services to residents. There have been and continue to be opportunities for business development that is in keeping with the character of Friendship like small-scale, traditional trades, and home-based occupations.

Telecommunications with improved broadband services allow more people to work where they want to, usually out of their homes with occasional trips to business meetings elsewhere. Greater bandwidth Internet capabilities are available in cities today and will be needed here if Friendship residents want to participate in the information economy.

- (3) *A list of local and regional economic development plans developed over the past five years, which include the community.*

The Midcoast Economic Development District, which includes Knox County and surrounding areas, prepares annual Comprehensive Economic Development Strategy (CEDS) reports. These reports outline economic trends and inventory planning and projects underway that seek to improve the economy by creating or retaining employment and services, and proposals for which there is community interest and for which funding from the U.S. Economic Development Agency is possible. No Friendship projects were included in the 2014 CEDS, the latest available.

- (4) *Where does the community's population work and where do employees in your community reside? A description of the major employers in the community and labor market area and their outlook for the future.*

As shown in the next table for 2014, most Friendship residents who work do so in Knox County 74.5%, with 40.9% working within Friendship. In 2000, 75.0% of Friendship residents worked in Knox County; of those, 33.8% worked within Friendship.

Work Place 2014 Category	Friendship Residents		Knox County Residents	
	Count	Percent	Count	Percent
Total:	479	100.0%	18,942	100.0%
Worked in town of residence	196	40.9%	7,141	37.7%
Worked in county of residence	357	74.5%	16,521	87.2%
Worked outside county of residence	118	24.6%	2,228	11.8%
Worked in state of residence:	475	99.2%	18,749	99.0%
Worked outside state of residence	4	0.8%	193	1.0%

Source: U.S. Census, American Community Survey (5-year estimates 2010-2014)

Most Friendship commuters (76.6%) drove to work alone. A modest percent (11.9%) carpooled. About 5.6% of Friendship residents worked at home.

Travel To Work 2014 Categories	Friendship		Knox County		Maine	
	Count	Percent	Count	Percent	Count	Percent
Total	479	100.0%	18,942	100%	632,757	100%
Car, truck, or van - drove alone	367	76.6%	14,120	74.5%	494,250	78.1%
Car, truck, or van - carpooled	57	11.9%	2,082	11.0%	65,134	10.3%
Public transportation (excluding taxicab)	5	1.0%	47	0.2%	4,061	0.6%
Walked	15	3.1%	1,006	5.3%	24,784	3.9%
Taxicab, motorcycle, bicycle, or other means	8	1.7%	394	2.1%	10,657	1.7%
Worked at home	27	5.6%	1,293	6.8%	33,871	5.4%

Source: U.S. Census, American Community Survey (5-year estimates 2010-2014)

Average travel times are longer for Friendship workers than for Knox County but lower than the State average.

Travel Time to Work 2014	Friendship	Knox County	Maine
Average in Minutes	22.6	18.5	23.5

Source: U.S. Census, American Community Survey (5-year estimates 2010-2014)

Most businesses in Friendship employ just a few people each. The next table shows a partial listing in 2014.

<b>Friendship Businesses and Employers in 2014</b>		
<b>Name</b>	<b>Address</b>	<b>Employee Range</b>
Bartlett Bench & Wire	574 Cushing Rd	1-4
Chet's Heating Services	12 Burns Dr	1-4
Christ Lumber Products	89 Hendrickson Ln	1-4
Coastal Builders	41 Log Cabin Dr	1-4
Crowart	341 Cushing Rd	1-4
Earls Masonry Svc	51 Cushing Rd	1-4
Friendship Lobster Co-op	195 Harbor Rd	1-4
Friendship Scoop Restaurant	403 Waldoboro Rd	1-4
Friendship United Methodist	8 Shipyard Rd	1-4
Lash Brothers Boat Yard	31 Cushing Rd	1-4
Lighthouse Creations	12 Shipyard Rd	1-4
Outsiders' Inn Bed & Breakfast	4 Main St	1-4
S Freitas Reflexology	8 Jameson Dr	1-4
Samuels Signs	50 Shipyard Rd	1-4
Simmons Boatworks Inc	11 Bayberry Dr	1-4
US Post Office	71 Harbor Rd	1-4
Wallace Lobster Corp	196 Harbor Rd	1-4
Wallace's Market	Main St	1-4
Year Round Lobsters Inc	3223 Col Stairs Rd	1-4
Advent Christian Church	19 Cushing Rd	5-9
Friendship Town Government	6 Harbor Rd, 4 Kale4 Ln	5-9
Gray's Heating Oils	634 Cushing Rd	5-9
Teel Island Lobster	Fire Rd	5-9
Friendship Village School	23 School St	20-49
Thermo Fisher Scientific	Martin Point Rd	20-49
Friendship Trap Company	570 Cushing Rd	50-99

Source: Maine Dept of Labor, Infogroup

For those living in Friendship and commuting elsewhere to work, there are varied opportunities within Knox County. The next table lists the 25 largest employers in Knox County ranked by the number of employees. According to the Maine Department of Labor, only the Penobscot Bay Medical Center employs between 501 and 1,000 employees. All other firms in Knox County employ fewer than 500 people each.

<b>Top 25 Private Employers In Knox County by Average Monthly Employment By County (1st Quarter 2015)</b>		
<b>Rank</b>	<b>Name</b>	<b>Sector</b>
1	Penobscot Bay Medical Center	General medical and surgical hospitals
2	Fisher Engineering	Construction machinery manufacturing
3	Wal Mart / Sam's Club	Discount department stores
4	Hannaford Bros Co	Supermarkets and other grocery stores
5	Camden National Bank	Commercial banking
6	North End Composites LLC	Boat building
7	O'Hara Corporation	Finfish fishing
8	Boston Financial Data Services Inc.	Telemarketing and other contact centers
9	Maritime Energy	Fuel dealers
10	Samorock LLC	Hotels and motels, except casino hotels
11	Quarry Hill	Nursing care facilities, skilled nursing
12	Penobscot Bay YMCA	Civic and social organizations
13	FMC Corporation	All other miscellaneous food manufacturing
14	Lowes Home Centers LLC	Home centers
15	Home Depot USA Inc	Home centers
16	Maine Behavioral Healthcare	Outpatient mental health centers
17	Shaws Supermarkets Inc	Supermarkets and other grocery stores
18	Coastal Opportunities Inc	Vocational rehabilitation services
19	Kno-Wal-Lin Home & Hospice Inc	Home health care services
20	Linda Beans Perfect Maine	Full-service restaurants
21	Lie-Nielsen Toolworks Inc	Saw blade and handtool manufacturing
22	Dragon Products Company LLC	Ready-mix concrete manufacturing
23	Windward Gardens	Nursing care facilities, skilled nursing
24	McDonald's	Limited-service restaurants
25	Penobscot Bay Physicians & Association	Offices of physicians, except mental health

Source: Maine Department of Labor

The medical sector provides a significant amount of employment in low, moderate and high wage positions. Given the forecasted aging of the region's population, this sector is likely to continue growing regardless of the overall condition of the State or national economy. Tourism-related activities also support many businesses.

The State's major private sector employers are found in service center communities like Augusta, Bangor and Portland. Many of these employers have multiple locations. Retail tops the list followed by medical services.

<b>Top 25 private employers in Maine by Average Monthly Employment (1st quarter 2015)</b>				
<b>Rank</b>	<b>Name</b>	<b>Location</b>	<b>Employment range</b>	<b>Business description</b>
1	Hannaford Bros Co	Statewide	7,001 to 7,500	Supermarkets grocery stores
2	Wal Mart / Sam's Club	Statewide	6,501 to 7,000	Discount department stores
3	Mainehealth	Portland	6,501 to 7,000	General medical surgical hospitals
4	Bath Iron Works Corporation	Bath	5,001 to 5,500	Ship building and repairing
5	L.L.Bean, Inc.	Statewide	4,501 to 5,000	Mail-order houses
6	Eastern Maine Medical Center	Statewide	3,501 to 4,000	General medical surgical hospitals
7	Maine General Medical Ctr	Statewide	3,001 to 3,500	General medical surgical hospitals
8	Central Maine Healthcare Corp	Lewiston	3,001 to 3,500	General medical surgical hospitals
9	Unum Provident	Portland	3,001 to 3,500	Direct life insurance carriers
10	TD Bank NA	Statewide	3,001 to 3,500	Commercial banking
11	Shaws Supermarkets Inc	Statewide	2,001 to 2,500	Supermarkets grocery stores
12	Webber Hospital Association	Statewide	1,501 to 2,000	General medical surgical hospitals
13	Mercy Hospital	Portland	1,501 to 2,000	General medical surgical hospitals
14	Goodwill Industries Northern NE	Statewide	1,001 to 1,500	Vocational rehabilitation services
15	Home Depot USA Inc	Statewide	1,001 to 1,500	Home centers
16	Circle K	Statewide	1,001 to 1,500	Gas stations convenience stores
17	Pratt & Whitney Aircraft Group	N Berwick	1,001 to 1,500	Aircraft engine and parts mfg.
18	Lowes Home Centers LLC	Statewide	1,001 to 1,500	Home centers
19	Jackson Laboratory	Bar Harbor	1,001 to 1,500	Research development biotech
20	St Mary's Regional Medical Ctr	Lewiston	1,001 to 1,500	General medical surgical hospitals
21	SD Warren	Statewide	1,001 to 1,500	Paper, except newsprint, mills
22	University of New England	Statewide	1,001 to 1,500	Colleges and universities
23	Rite Aid of Maine Inc	Statewide	1,001 to 1,500	Pharmacies and drug stores
24	Sunday River Skiway	Statewide	1,001 to 1,500	Skiing facilities
25	Bowdoin College	Brunswick	1,001 to 1,500	Colleges and universities

Source: Maine Department of Labor

**Policies**

- (1) To support the type of economic development activity the community desires, reflecting the community's role in the region.
- (2) To make financial commitments, if necessary, to support desired economic development, including needed public improvements.
- (3) To coordinate with regional development corporations and surrounding towns as necessary to support desired economic development.

**Strategies**

<b>Economy: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<p>(1) If appropriate, assign responsibility and provide financial support for economic development activities to the proper entity (e.g., a local economic development committee, a local representative to a regional economic development organization, the community's economic development director, a regional economic development initiative, or other).,</p> <ul style="list-style-type: none"> <li>• Appoint an Economic Development Committee that will track and evaluate the "State of the Friendship economy" on an ongoing basis and report to Selectmen annually on actions that could be taken to improve Friendship's business climate and investment.</li> </ul>	<p>Selectmen, Economic Development Committee</p>	<p>Immediate</p>
<p>(2) Enact or amend local ordinances to reflect the desired scale, design, intensity, and location of future economic development</p> <ul style="list-style-type: none"> <li>• Amend as needed the site plan review ordinance to ensure that performance standards are sufficiently flexible to adapt to changing commercial needs while retaining compatibility with residential neighborhoods and adjacent properties.</li> </ul>	<p>Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote</p>	<p>Immediate and Ongoing</p>
<p>(3) If public investments are foreseen to support economic development, identify the mechanisms to be considered to finance them (local tax dollars, creating a tax increment financing district, a Community Development Block Grant or other grants, bonding, impact fees, etc.)</p>	<p>Selectmen and Town Meeting Vote</p>	<p>See the Capital Investment Plan for items and timeframes</p>
<p>(4) Participate in any regional economic development planning efforts that are relevant to improving the economic health of Friendship.</p>	<p>Economic Development Committee and Selectmen</p>	<p>Midterm and Ongoing</p>
<p>(5) Consider enacting Business Registry requirements to track and to communicate with the business community</p>	<p>Economic Development Committee and Selectmen</p>	<p>Immediate and Ongoing</p>

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within

two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

## EXISTING LAND USE

### Introduction

This chapter summarizes existing development in Friendship, trends observed, current regulations and an estimate of the amount of land needed to accommodate growth for the ten-year planning period. Information from the other chapters of this comprehensive plan has been incorporated in the analyses of this chapter. For land use recommendations, see the Future Land Use Plan.

#### A. State Goal

*None required.*

#### B. Analyses

- (1) *Is most of the recent development occurring: lot by lot; in subdivisions; or in planned developments? Is recent development consistent with the community's vision?*

Most development has been occurring lot by lot. The Census records that 120 homes were built in Town from 1990 to 2013, for an annual average of about five units. From 2004 to 2013, there were 61 housing unit permits issued. For planning purposes, an estimated 75 units of new housing is forecast to be built based upon trends seen, for a projected total of 1,013 units (occupied and vacant) by the year 2026. See the Housing Chapter for more information. Some seasonal units currently classified by the Census as vacant could be converted to year-round use, offsetting the need for some of the new units forecasted. However, it is likely that new seasonal housing will be constructed in addition to the construction of new year-round units.

These roads have seen the most new development Bradford Point Rd, Wadsworth Point Rd, and Waldoboro Rd (Route 220), especially near the Goose River. Planning board records indicate that no major subdivisions involving the construction of new roadways were approved between 2000 and 2016. Just a few lots were subdivided as minor subdivisions.

Modest growth is likely to continue throughout the community following recent and longer-term trends. There is both ample commercial and residential space for the projected development over the next ten years. Care should be taken to steer growth away from the more rural and forested areas and instead into areas with access to existing infrastructure, roads and services, in line with the community vision as has been the case with recent development.

- (2) *What regulatory and non-regulatory measures would help promote development of a character, and in locations that are consistent with the community's vision?*

The current minimum lot area in most of the Town is 40,000 square feet. Limitations in uses allowed and other restrictions in the Stream Protection District and Resource Protection District, and other wetlands help to protect the natural resources that define the rural qualities of Friendship in accordance with the community's vision. See the Natural Resources Chapter and the Water Resources Chapter. Friendship's current ordinances reflect the recommendations of

the prior comprehensive plan, which was adopted by voters in 1996. That plan was found consistent with state law.

Non-regulatory measures for protection of rural areas include the voluntary use of conservation easements by landowners, and participation in state current use tax program for farming and forestry activities. See the Agricultural and Forestry Resources Chapter.

Non-regulatory measures to encourage development in more suitable areas, around the traditional areas of settlement, including municipal investment in infrastructure improvement might be worth pursuing where economically feasible and in line with town voter approval. See the Housing Chapter, Economy Chapter, Public Facilities and Services Chapter, and Future Land Use Plan.

(3) *Is the community's administrative capacity adequate to manage its land use regulation program, including planning board and code enforcement officer?*

With the limited projected growth, the present administrative capacity seems adequate. The Planning Board has been able to adequately review permit requests and Town citizens have land use ordinances that have worked well. The Code Enforcement Officer has handled the limited pace of growth and the Town Office staff has been able to assist residents on issues in a timely manner.

The Town should support the Code Enforcement Officer and provide him or her with the tools, training, and support necessary to enforce land use regulations, and ensure that the Code Enforcement Officer continues to be certified in accordance with 30-A M.R.S.A. Section 4451.

(4) *Are floodplains adequately identified and protected? Does the community participate in the National Flood Insurance Program? If not, should it? If so, is the floodplain management ordinance up to date and consistently enforced? Is the floodplain management ordinance consistent with state and federal standards?*

The Town participates in the National Flood Insurance Program. Friendship previously enacted a Floodplain Management Ordinance in 1999, and enacted the current version in 2016. It meets Federal and State standards and is enforced locally. Recent changes to the National Floodplain Management Program and floodplain maps will be incorporated into the local ordinance under the timeframe set by FEMA.

### C. Conditions and Trends

*Minimum data required to address Analyses:*

- (1) *An existing land use map, by land use classification (such as mixed-use, residential, commercial, institutional, industrial, agricultural, commercial forests, marine, park/recreational, conserved, and undeveloped land).*

See the maps titled Land Cover and Current Land Use: Shoreland Zoning, Landfill and Wellhead Protection.

- (2) *A summary of current lot dimensional standards.*

See the response to (4) below.

- (3) *A description or map identifying the location of lots and primary structures created within the last ten years. Include residential, institutional, commercial, and industrial development.*

As noted, from 2004 to 2013, there were 61 housing unit permits issued. Construction since 2005 has occurred throughout the Town. Most of this development has been residential on lots for single-family houses. These roads have seen the most new development Bradford Point Rd, Wadsworth Point Rd, and Route 220, especially near the Goose River. There has been one small subdivision with minor activity in the last ten years. Commercial development has occurred mostly in or near the village, along Route 97, and to a lesser extent on Waldoboro Rd (Route 220). New or expanded industrial development has not occurred in the last ten years, with the exception of boat building. See the map titled Land Cover for the location of developed areas and corresponding acreages by land cover type (land uses).

- (4) *Provide a brief description of existing land use regulations and other tools utilized to manage land use, including shoreland zoning, floodplain management, subdivision, site plan review, and zoning ordinances.*

Friendship's current ordinances reflect the recommendations of the prior comprehensive plan, which was adopted by voters in 1996. That plan was found consistent with state law. The Land Use Ordinance allows single-family dwellings, manufactured homes, mobile homes on individual lots, and two family dwellings through planning board review in nearly the entire Town. Multi-family dwellings are allowed in most of the Town through the Subdivision Ordinance and/or Site Plan Review Ordinance. The minimum lot size per residential dwelling unit is 40,000 square feet. Mobile home parks are allowed town-wide, excluding resource protection districts. Non-residential and mixed uses are allowed in most districts, and are subject to dimensional standards and site plan review standards. The next table summarizes dimensional standards in the Land Use Ordinance.

<b>Town-wide Lot Standards outside of Shoreland Zone Districts</b>	<b>Dimensional Standards</b>
Minimum Lot Area Per Dwelling Unit	40,000 square feet
Industrial Uses	80,000 square feet
Campgrounds	120,000 square feet
All Other Non-Residential Uses	40,000 square feet
Maximum Building Height (Feet)	
Residential	35 feet
Non-Residential	35 feet
Structure setbacks (applies only to non-residential/commercial/industrial, and multifamily structures):	
Setback-from road	50 feet from road centerline
Setback-from side lot line	20 feet
Setback-from back lot line	20 feet
Corner Clearance	40 feet

Source: Land Use Ordinance, Town of Friendship

The next table summarizes dimensional standards in the Shoreland Zoning Ordinance.

<b>Shoreland Zone (SZ) Lot Standards</b>	<b>Minimum Lot Area (square feet)</b>	<b>Minimum Shore Frontage (feet)</b>
<i>Residential per dwelling unit:</i>		
Within SZ adjacent to tidal areas	40,000	150
Within SZ adjacent to non-tidal areas	40,000	200
<i>Governmental, Institutional, Commercial or Industrial per principal structure:</i>		
Within SZ adjacent to tidal areas, excluding Commercial Fisheries District and Maritime Activities District	40,000	200
Within SZ adjacent to tidal areas of Commercial Fisheries District and Maritime Activities District	None	None
Within SZ adjacent to non-tidal areas	60,000	300
<i>Public and Private Recreational Facilities:</i>		
Within SZ adjacent to tidal and non-tidal areas	40,000	200

Source: Friendship Shoreland Zoning Ordinance

Note: See the ordinance for more information and additional standards.

The largest district along the coast within the Shoreland Zone is the Rural Residential District, which allows for residential development among various other uses. See the map titled Current Land Use: Shoreland Zoning, Landfill and Wellhead Protection. Impervious surface percentage maximums, as set in shoreland zoning provisions for this and other districts, can be effective in reducing the amount of runoff into waterbodies. In especially sensitive areas, resource protection designations limit or prohibit development. Multi-unit residential, commercial, industrial, governmental and institutional uses are prohibited in the Stream Protection District and in the Resource Protection District, which includes large areas of inland wetlands. The Commercial

Fisheries District and Marine (Maritime) Activities District prohibit single-family and multi-unit residential to protect the existing working waterfront activities and marine-related businesses.

Erosion and sediment control are found in the Land Use Ordinance, Site Plan Review Ordinance, Shoreland Zoning Ordinance, and in the Subdivision Ordinance. These standards promote retention of stormwater on the property to minimize runoff. It is believed that these provisions are effective overall, but could be enhanced by adopting low impact development strategies.

The Subdivision Ordinance, adopted in 2001, regulates subdivision development following state review criteria requirements. It has been used in the review of one minor subdivision proposal and has been found to be adequate. It includes provisions for cluster development and for conservation within both cluster and conventional subdivisions. Possible amendments to this and other ordinances are described in the Future Land Use Plan.

The Site Plan Review Ordinance regulates new, expanded or converted nonresidential use, commercial, industrial, municipal, office, institutional or multi residential uses, including principal and accessory buildings and structures. This ordinance also regulates nonresidential use even if no buildings or structures are proposed, including uses such as gravel pits, cemeteries, golf courses, and other nonstructural nonresidential uses. As well, the construction or expansion of paved areas or other impervious surfaces, including walkways, access drives, and parking lots involving an area of more than 2,500 square feet are regulated under the Site Plan Review Ordinance.

The Land Use Ordinance allows home occupations town-wide.

Agriculture uses, forest management and timber harvesting are allowed town-wide including the shoreland zone, with some limitations. The Site Plan Review Ordinance amended in 2005 does not apply to agricultural activities, agricultural buildings and structures, and timber harvesting and forest management activities.

The Friendship Land Fill Protection Ordinance limits development around a closed landfill in order to avoid the contamination of new groundwater drinking supplies in close proximity to potential contamination sources and to avoid the potential hazard of gas migration from the solid waste disposal facility to nearby dwellings. This area is near Finntown Rd and the Cushing town line. See the map titled Current Land Use: Shoreland Zoning, Landfill and Wellhead Protection.

The Wellhead Protection Zone Ordinance limits development within an area that surrounds the drinking water supply wells for the village area served by public water. This zone straddles Route 220 between Harbor Rd and Martin Point Rd. See the map titled Current Land Use: Shoreland Zoning, Landfill and Wellhead Protection.

As noted above, the Town's current Floodplain Management Ordinance was enacted in 2016. It meets Federal and State standards and is enforced locally. Recent changes to the National Floodplain Management Program and floodplain maps will be incorporated into the local ordinance under the timeframe set by FEMA. The Town participates in the National Flood Insurance Program.

- (5) *Estimate the minimum amount of land needed to accommodate projected residential, institutional, commercial, or industrial development at least ten (10) years into the future.*

As described in the Housing Chapter, the Census records that 120 homes were built in Town from 1990 to 2013, for an annual average of about five units. From 2004 to 2013, there were 61 housing unit permits issued. For planning purposes, an estimated 75 units of new housing is forecast to be built based upon trends seen, for a projected total of 1,013 units (occupied and vacant) by the year 2026. Some seasonal units currently classified by the Census as vacant could be converted to year-round use, offsetting the need for some of the new units forecasted. However, it is likely that new seasonal housing will be constructed in addition to the construction of new year-round units.

Those 75 new units would require at least 69 acres, based upon the current minimum lot area per dwelling unit. If this development occurred within conventional subdivisions, approximately an additional 7 acres could be needed for new roads and related infrastructure. Development in cluster/conservation subdivisions could occur on smaller lots, reducing the developed area for an increase in conserved land.

Institutional, commercial, or industrial development has been very limited in Friendship since 2000. Small-scale non-residential uses have occurred, often on lots previously used for other commercial or residential purposes, especially along Route 97 and Route 220. It is anticipated that similar activities will continue, and that there is enough land with road frontage on state roads, which can handle increased development, within the designated growth areas for the planning period. See the Future Land Use Plan and map titled Future Land Use for the identified growth areas.

#### ***D. Policies***

*None Required.* See the Future Land Use Plan.

#### ***E. Strategies***

*None required.* See the Future Land Use Plan.

# Land Cover

**LEGEND**

State roads       Private/Other roads  
 Town roads       Water

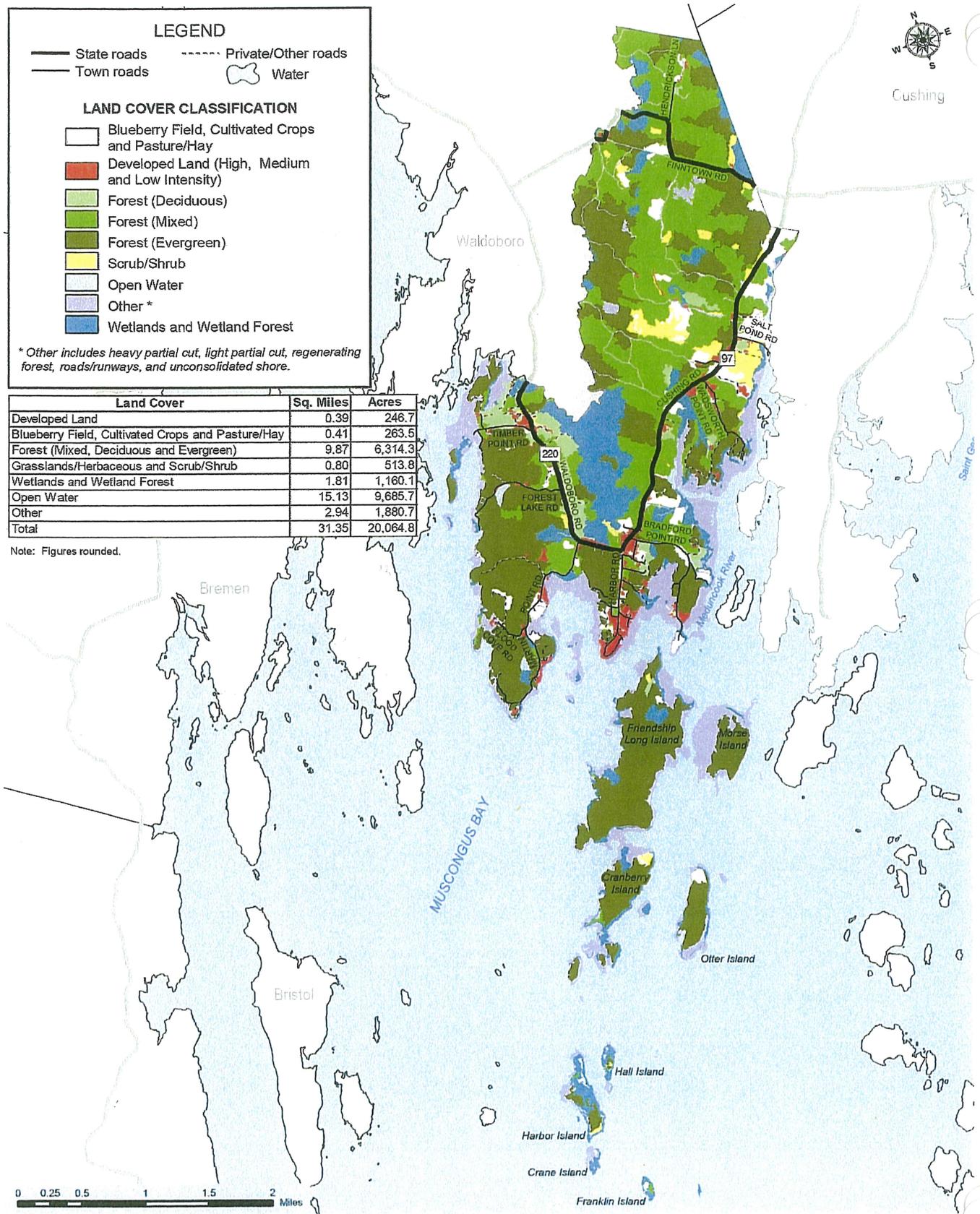
**LAND COVER CLASSIFICATION**

- Blueberry Field, Cultivated Crops and Pasture/Hay
- Developed Land (High, Medium and Low Intensity)
- Forest (Deciduous)
- Forest (Mixed)
- Forest (Evergreen)
- Scrub/Shrub
- Open Water
- Other \*
- Wetlands and Wetland Forest

\* Other includes heavy partial cut, light partial cut, regenerating forest, roads/runways, and unconsolidated shore.

Land Cover	Sq. Miles	Acres
Developed Land	0.39	246.7
Blueberry Field, Cultivated Crops and Pasture/Hay	0.41	263.6
Forest (Mixed, Deciduous and Evergreen)	9.87	6,314.3
Grasslands/Herbaceous and Scrub/Shrub	0.80	513.8
Wetlands and Wetland Forest	1.81	1,160.1
Open Water	15.13	9,685.7
Other	2.94	1,880.7
<b>Total</b>	<b>31.35</b>	<b>20,064.8</b>

Note: Figures rounded.

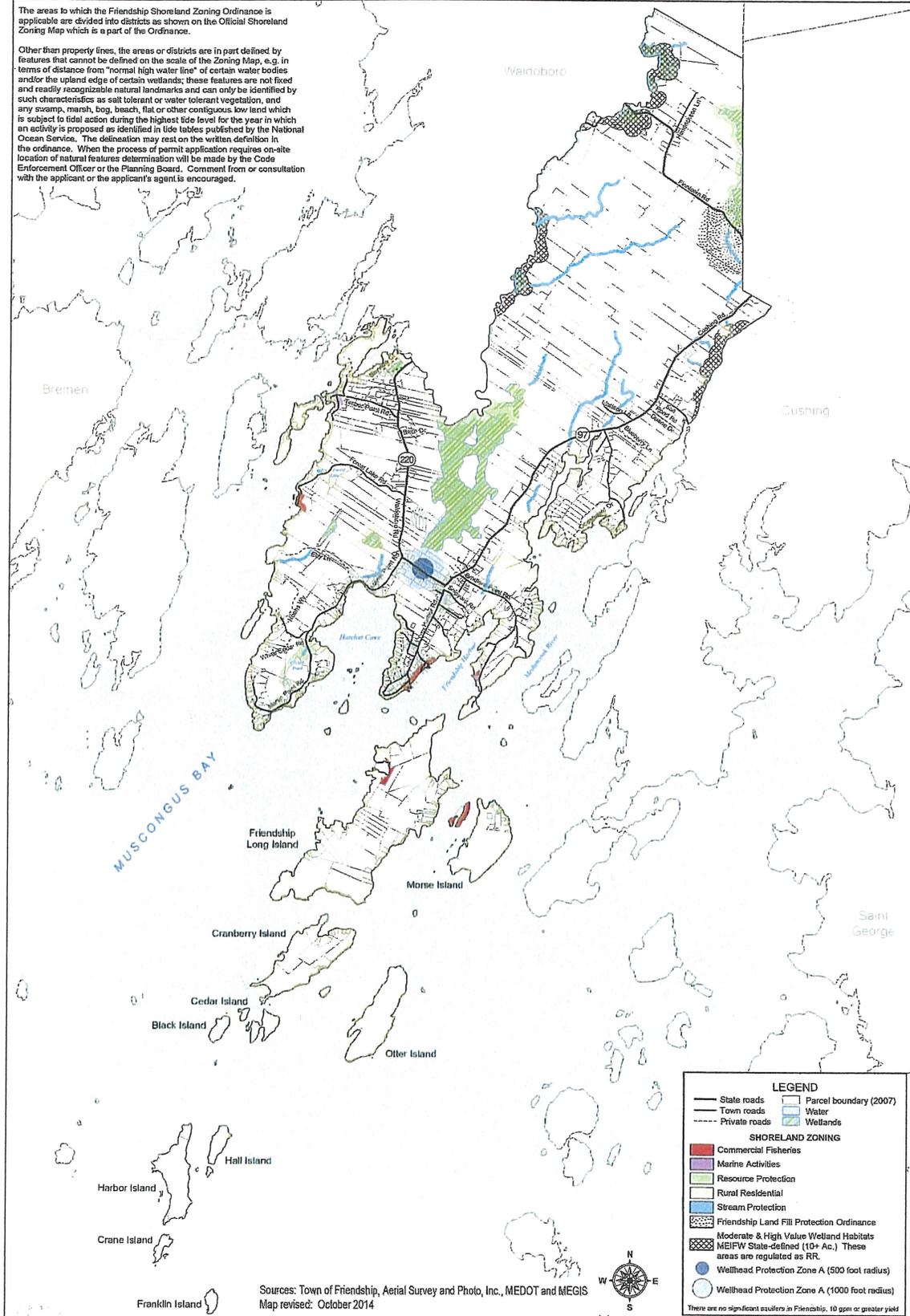


Source: Maine GIS

# Current Land Use: Shoreland Zoning, Landfill and Wellhead Protection

The areas in which the Friendship Shoreland Zoning Ordinance is applicable are divided into districts as shown on the Official Shoreland Zoning Map which is a part of the Ordinance.

Other than property lines, the areas or districts are in part defined by features that cannot be defined on the scale of the Zoning Map, e.g. in terms of distance from "normal high water line" of certain water bodies and/or the upland edge of certain wetlands; these features are not fixed and readily recognizable natural landmarks and can only be identified by such characteristics as salt tolerant or water tolerant vegetation, and any swamps, marsh, bog, beach, flat or other contiguous low land which is subject to tidal action during the highest tide level for the year in which an activity is proposed as identified in tide tables published by the National Ocean Service. The delineation may rest on the written definition in the ordinance. When the process of permit application requires on-site location of natural features determination will be made by the Code Enforcement Officer or the Planning Board. Comment from or consultation with the applicant or the applicant's agent is encouraged.



Source: Town of Friendship

# FUTURE LAND USE PLAN

## Introduction

This proposed land use plan has been formed by considering the historical development of the community and existing natural resource constraints in order to best accommodate future growth. The goal of this chapter is to encourage the types of development and conservation that residents support. The recommendations and implementation strategies described here have been shaped by the inventory, analysis and policies developed in each section of this Comprehensive Plan and by public comments and the public opinion survey. Consideration has been given both to existing land use patterns and to the expected future land use needs. This Comprehensive Plan is not a land use ordinance, but it can serve as the legal foundation of current and future land use ordinances, as the previous Comprehensive Plan has done.

## State Goal

*To encourage orderly growth and development in appropriate areas of each community, while protecting the state's rural character, making efficient use of public services, and preventing development sprawl.*

The State definitions of land based upon predominant uses are shown in the next table along with the current corresponding Friendship Land Use Ordinance and Shoreland Zoning Districts. Proposed recommendations for the Future Land Use Plan are included in this table as well.

<b>Future Land Use Table: Current Area Designations and Future Land Use Recommendations</b>	
<b>State Definitions</b>	<b>Friendship Current Areas and Current Shoreland Zoning (SZ) Districts, and Future Land Use Plan Recommendations</b>
<p><b>Growth Area:</b> an area that is designated in a community's comprehensive plan as suitable for orderly residential, commercial, or industrial development, or any combinations of those types of development and related infrastructure, and into which most development projected over 10 years is directed.</p>	<ul style="list-style-type: none"> <li>• Current SZ Commercial Fisheries</li> <li>• Current SZ Marine Activities</li> <li>• Proposed: Village Mixed Use (Friendship and East Friendship) area will allow for forecasted development over the planning period. If public sewer becomes available, the minimum lot sizes in this area could be lowered from 40,000 square feet to 20,000 square feet (approximately half an acre) to encourage more affordable housing options, with consideration of standards as listed in the strategies section.</li> </ul>

<b>Future Land Use Table: Current Area Designations and Future Land Use Recommendations</b>	
<b>State Definitions</b>	<b>Friendship Current Areas and Current Shoreland Zoning (SZ) Districts, and Future Land Use Plan Recommendations</b>
<p><b>Critical rural area:</b> means a rural area that is specifically identified and designated by a community's comprehensive plan as deserving maximum protection from development to preserve natural resources and related economic activities that may include, but are not limited to, significant farmland, forest land or mineral resources; high-value wildlife or fisheries habitat; scenic areas; public water supplies; scarce or especially vulnerable natural resources; and open lands functionally necessary to support a vibrant rural economy.</p>	<ul style="list-style-type: none"> <li>• Current SZ Resource Protection</li> <li>• Current SZ Resource Protection for Moderate and High Value Freshwater Wetlands</li> <li>• Current SZ Steam Protection</li> <li>• Current Significant Wildlife Habitats (See Summary Natural Constraints map)</li> <li>• Current Conserved Lands (reserves, conservation easements)</li> </ul> <p>These areas are not suitable for development as regulated currently, and this plan recommends that these areas remain undeveloped or limited to uses that do not degrade the environment and do not threaten surface water and groundwater quality.</p>
<p><b>Rural area:</b> a geographic area that is identified and designated in a community's comprehensive plan as an area that is deserving of some level of regulatory protection from unrestricted development for purposes that may include, but are not limited to, supporting agriculture, forestry, mining, open space, wildlife habitat, fisheries habitat, and scenic lands, and away from which most development projected over 10 years is diverted.</p>	<ul style="list-style-type: none"> <li>• Current SZ Limited Residential</li> <li>• Proposed: Rural Mixed Use: Town wide, excluding Growth Areas and Critical Rural Areas</li> </ul> <p>These rural areas allow mixed uses typically less dense than seen in village areas. The ordinance standards are recommended to continue in this plan at the same density levels as currently enacted, and with consideration of additional performance standards as listed in the strategies section below to promote traditional rural uses like agriculture and forestry.</p>
<p><b>Transitional area:</b> an area that is designated in a community's comprehensive plan as suitable for a share of projected residential, commercial, or industrial development but that is neither intended to accept the amount or density of development appropriate for a growth area nor intended to provide the level of protection for rural resources afforded in a rural area or critical rural area.</p>	<p>None</p>

### **Required Elements for the Future Land Use Plan**

See the map titled Future Land Use at the end of this chapter for the location of Growth (Approximate), Rural, Rural Conserved, and Rural Critical Natural Resources. The Summary Natural Constraints map shows natural constraints to development identified in this plan including wetlands and habitats. Growth and rural areas are defined in the Area Designations Table above. See the Strategies section below for the recommendations of this Future Land Use Plan.

## Analyses of Future Land Uses

*(1) Does the future land use plan align and/or conflict with the community's vision statement?*

The future land use plan aligns with the community vision statement. Namely, the vision statement calls for maintaining the physical character of the community, which is embraced in the recommendations and implementation strategies of the future land use plan.

*(2) Is the configuration of the growth areas shaped by natural opportunities and/or constraints (i.e. the physical suitability or unsuitability of land for development)? The location of public facilities? The transportation network?*

Yes, the growth areas take into account existing infrastructure, historic patterns of development of village areas for the growth anticipated over the next ten-year planning period, as well as the location of public facilities, and the transportation network.

*(3) How does the future land use plan relate to recent development trends?*

This future land use plan takes into account the historical and recent development trends and suggests review and amendments to municipal ordinances to provide for the orderly continuation of development and to protect natural resources.

*(4) Given current regulations, development trends and population projections, estimate how many new residential units and how much commercial, institutional and/or industrial development will likely occur in the planning period? Where is this development likely to go?*

As noted in the Population and Demographics Chapter, the State forecasts that Friendship's population will increase to 1,153 persons in 2025 and then decline to 1,143 in 2030. The Town's average household size has decreased over several decades. In 2014, it was estimated at 2.25 persons down from 2.49 in 1990. If that trend continues, the 2026 average household size could be 2.1 persons. With a projected population for planning purposes of up to 1,200 people by the year 2026, 572 housing units would be needed for occupancy. In 2014, the Census estimated there were 470 occupied housing units in Friendship out of 939 total housing units (occupied and vacant). Therefore, up to an additional 102 units would be needed for year-round use by 2026.

As noted in the Housing Chapter, the Census records that 121 homes were built in Town from 1990 to 2014, for an annual average of about five units. From 2005 to 2014, there were 55 housing unit permits issued. If 102 units are built between 2016 to 2026, it would be significantly more than the amount of growth seen during the previous decade, a period of economic recession affecting the housing market. For planning purposes, an estimated 72 units of new housing is forecast based upon longer term trends, for a projected total of 1,011 total units (occupied and vacant) by the year 2026. Some seasonal units currently classified by the Census as vacant could be converted/returned to year-round use, offsetting the need for up to an estimated 30 new units. However, it is also likely that new seasonal housing will be constructed in addition to the construction of new year-round units.

Those 72 new units would require at least 67 acres, based upon the current minimum lot area per dwelling unit of 40,000 square feet. If this development occurred within conventional subdivisions, approximately an additional 7 acres could be needed for new roads and related infrastructure. Development in cluster/conservation subdivisions could occur on smaller lots, reducing the developed area for an increase in conserved land. Most of this housing is anticipated along existing roadways (public and private) near the village areas and adjacent shoreland areas.

Institutional, commercial, or industrial development has been limited in Friendship since 2000. Small-scale non-residential uses have occurred, often on lots previously used for other commercial or residential purposes, especially along Route 97 and Route 220. It is anticipated that similar activities will continue, and that there is enough land with road frontage on state roads, which can handle increased development, within the designated growth areas for the planning period.

It is projected that commercial growth will be modest. As noted in the Economy Chapter, according to the Maine Department of Labor, 13 new businesses were located in Friendship from 2003 to 2013, for 40 firms in total, employing 137 people. Most were home businesses with minimum or no commercial impact. It is projected that future growth will be similar in scale and not require major changes to the land use ordinance. However, adopting enhanced design standards could improve the acceptability of new businesses especially when located near existing residences.

Land use ordinances should be amended to better protect environmentally sensitive areas and provide for additional affordable housing opportunities as described in the Housing Chapter. Some additional residential rental housing could occur with the introduction of more flexible standards for accessory (in-law) apartments. See the Housing Chapter. Such options would assist lower income and elderly residents remain in Friendship. Currently, affordable rental housing is largely found in neighboring Waldoboro and nearby Rockland.

The proposed growth areas (approximately 300 acres) are within and surrounding existing village areas and commercially zoned parcels. These areas include parcels already developed, but also have sufficient space available for the forecasted development. See the map titled Future Land Use.

*(5) How can critical natural resources and important natural resources be effectively protected from future development impact?*

Shoreland Zoning, the Resource Protection Zone, and Wellhead Protection Zones protect critical natural resources. Most of the Town's critical natural resources are located in the shoreland areas. The strategies section of this plan recommends continuation of these zones and districts. As well, this plan suggests the use of conservation easements, cluster subdivisions and low impact development standards among other recommendations that would protect critical natural resources. See the strategies section below.

**Policies**

1. *To coordinate the community's land use strategies with other local and regional land use planning efforts.*
2. *To support the locations, types, scales, and intensities of land uses the community desires as stated in its vision.*
3. *To support the level of financial commitment necessary to provide needed infrastructure in growth areas.*
4. *To establish efficient permitting procedures, especially in growth areas.*
5. *To protect critical rural and critical waterfront areas from the impacts of development.*

**Strategies**

The Comprehensive Plan and its Future Land Use Plan are not a land use ordinance, but they can serve as a legal foundation of current and future land use ordinance and strategies for issues that will influence growth within the Town in a manner consistent with public opinion as expressed in public meetings and the results of the Friendship Comprehensive Plan survey. Note: The italicized strategies are the state minimum required. Land use related strategies from the other chapters of this Comprehensive Plan are also included in this table.

Note: Text in blue is supplemental, meant to support the required strategies provided by the State (italicized).

Strategies	Responsible Parties	Timeframe
(1) <i>Assign responsibility for implementing the Future Land Use Plan to the appropriate committee, board or municipal official.</i>	See the strategies below	See timeframes below
(2) <i>Using the descriptions provided in the Future Land Use Plan narrative, maintain, enact or amend local ordinances as appropriate to:</i> <i>a. Clearly define the desired scale, intensity, and location of future development;</i> <i>b. Establish or maintain fair and efficient permitting procedures, and explore streamlining permitting procedures in growth areas; and</i> <i>c. Clearly define protective measures for critical natural resources and, where applicable, important natural resources.</i> <i>d. Clearly define protective measures for any proposed critical rural areas and/or critical waterfront areas, if proposed.</i>	See Future Land Use Plan Table and narrative above and the strategies below	See timeframes below

Strategies	Responsible Parties	Timeframe
(3) <i>Include in the Capital Investment Plan anticipated municipal capital investments needed to support proposed land uses.</i>	Selectmen and Town Meeting Vote, See the Capital Investment Plan	Long Term
(4) <i>Meet with neighboring communities to coordinate land use designations and regulatory and non-regulatory strategies.</i>	Planning Board, Ordinance Review Committee, Selectmen	Midterm
(5) <i>Provide the code enforcement officer with the tools, training, and support necessary to enforce land use regulations, and ensure that the Code Enforcement Officer is certified in accordance with 30-A M.R.S.A. §4451.</i>	Selectmen	Immediate
(6) <i>Track new development in the community by type and location.</i>	Planning Board, Code Enforcement Officer	Immediate and Ongoing
(7) <i>Direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas identified in the Future Land Use Plan.</i>	Selectmen, and Town Meeting Vote	Long Term
(8) <i>Periodically (at least every five years) evaluate implementation of the plan</i>	Planning Board, Code Enforcement Officer	Midterm
(9) Conservation Easements: Encourage the voluntary use of conservation easements for environmentally sensitive properties with critical habitats or scenic and recreational value to the community.	Selectmen, Planning Board, and Conservation Commission	Immediate and Ongoing
(10) Floodplain Management: Amend the Floodplain Management Ordinance, as needed to meet new federal requirements. Consider potential impact of climate change on land use options and ordinances.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Immediate
(11) Land Use Ordinance, Site Plan Review: Amend as needed site plan review provisions to protect residential uses from new and expanded commercial uses with harmonious design and year-round buffering, given the mixed-use development pattern that exists and is likely to continue in much of the Town.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Long Term

Strategies	Responsible Parties	Timeframe
<p>(12) Land Use Ordinance: From Agricultural and Forestry Resources Chapter: <i>Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable.</i></p> <ul style="list-style-type: none"> <li>The Town should review the potential of conservation subdivision regulations in sensitive areas. To preserve open spaces, forestland, and farm fields and should consult with Maine Forest Service District Forester and Soil and Water Conservation District staff when developing these regulations.</li> </ul> <p>AND</p> <p><i>Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.</i></p>	<p>Selectmen, Planning Board, Ordinance Review Committee, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Immediate and Midterm</p>
<p>(13) Land Use Ordinance: From Economy Chapter: <i>Enact or amend local ordinances to reflect the desired scale, design, intensity, and location of future economic development</i></p> <ul style="list-style-type: none"> <li>Amend as needed the site plan review ordinance to ensure that performance standards are sufficiently flexible to adapt to changing commercial needs while retaining compatibility with residential neighborhoods and adjacent properties.</li> </ul>	<p>Economic Development Committee, Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote</p>	<p>Immediate and Ongoing</p>
<p>(14) Land Use Ordinance: From Housing Chapter: <i>Maintain, enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to encourage the development of affordable/workforce housing.</i></p> <p>AND</p> <p><i>Maintain, enact or amend ordinances to allow the addition of at least one accessory apartment per dwelling unit in growth areas and to promote conservation/cluster affordable housing in such areas, subject to site suitability.</i></p>	<p>Planning Board, Selectmen, Ordinance Review Committee, and Town Meeting Vote</p>	<p>Immediate</p>

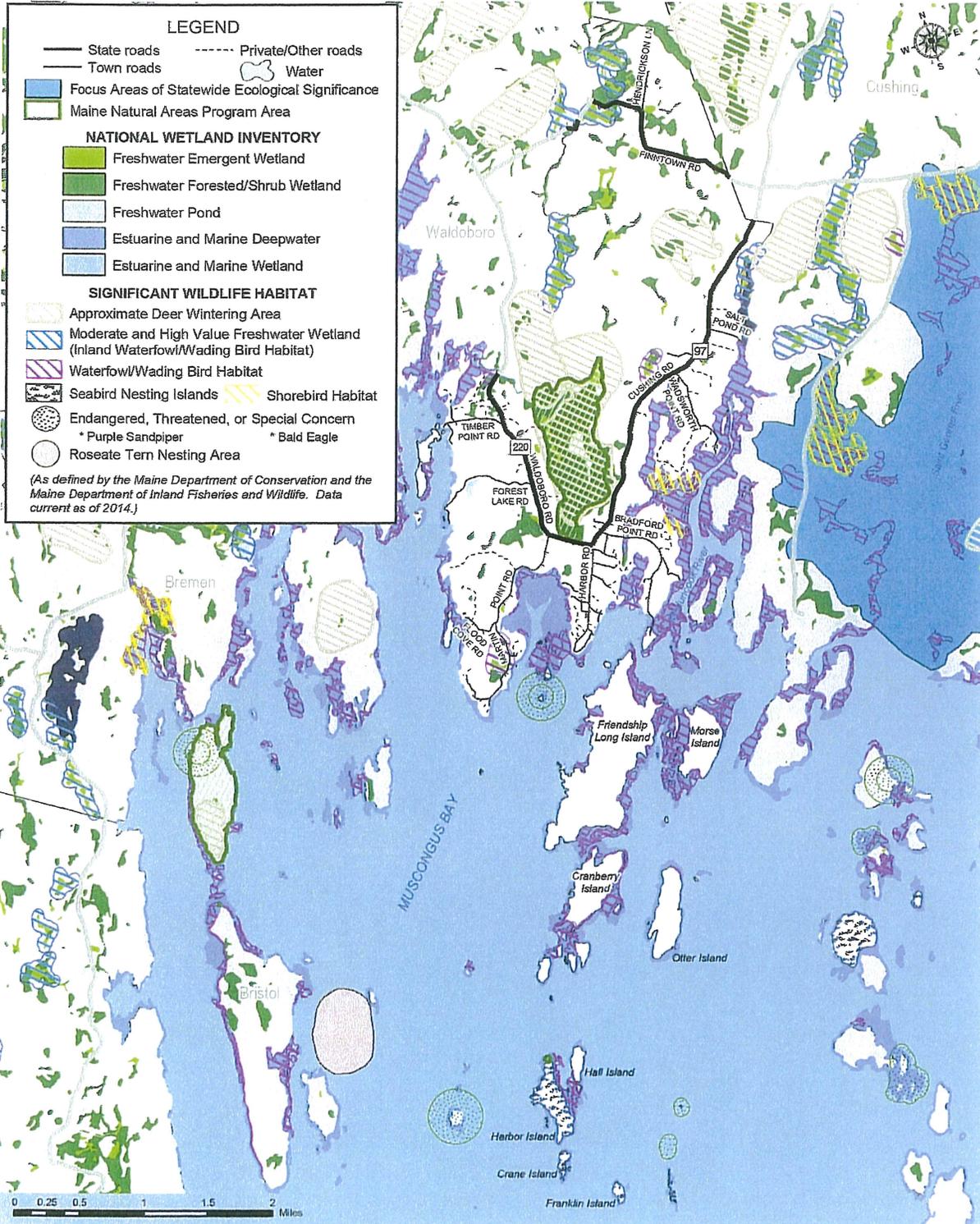
Strategies	Responsible Parties	Timeframe
(15) Land Use Ordinance: From Natural Resources Chapter: <i>Through local land use ordinances, require the planning board (or other designated review authority) to include as part of the review process, consideration of pertinent BwH maps and information regarding critical natural resources.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Immediate and Ongoing
(16) Land Use Ordinance: From Transportation Chapter: <i>Enact or amend local ordinances as appropriate to address or avoid conflicts with:</i> <ul style="list-style-type: none"> <li><i>a) Policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A.73)</i></li> <li><i>b) State access management regulations pursuant to 23 M.R.S.A. 704: To maintain and improve traffic flows, and improve safety, future land use ordinance provisions should be in harmony with access management performance standards set in current state regulations for state and state aid roadways.</i></li> <li><i>c) State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. 704-A.</i></li> </ul>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm
(17) Land Use Ordinance: From Water Resources Chapter: <i>Adopt or amend local land use ordinances as applicable to incorporate storm water runoff performance standards consistent with:</i> <ul style="list-style-type: none"> <li><i>a) Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502).</i></li> <li><i>b) Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds.</i></li> <li><i>c) Maine Pollution Discharge Elimination System Stormwater Program.</i></li> </ul> AND <i>Consider amending local land use ordinances, as applicable, to incorporate low impact development standards.</i>	Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote	Midterm
(18) Shoreland Zoning Ordinance: Amend the Shoreland Zoning Ordinance, as needed, to meet State requirements.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Long Term

Strategies	Responsible Parties	Timeframe
(19) Subdivision Ordinance: Amend subdivision criteria to meet current State requirements in Title 30-A, M.R.S.A. Section 4404.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Midterm
(20) Subdivision Ordinance: From Natural Resources Chapter: <i>Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.</i>	Planning Board, Ordinance Review Committee, Conservation Commission, Code Enforcement Officer, and Town Meeting Vote	Midterm
(21) Subdivision Ordinance: From Transportation Chapter: <i>Enact or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

As the Planning Board is responsible for current permit reviews, it might be useful for the Selectmen to appoint members to an Ordinance Review Committee to review and write ordinance amendments, consulting with Town officials, the Planning Board, and the public. The Selectmen can revise ordinance amendments and place them on the Town warrant for Town meeting vote. The recommendations in this Future Land Use Plan should be drafted and presented to voters as shown in the timeframe column of the preceding table of strategies.

# Summary Natural Constraints



Sources: NRCS, USFWS, Maine IF&W, MNAP, MEDOT, MGS, MEGIS

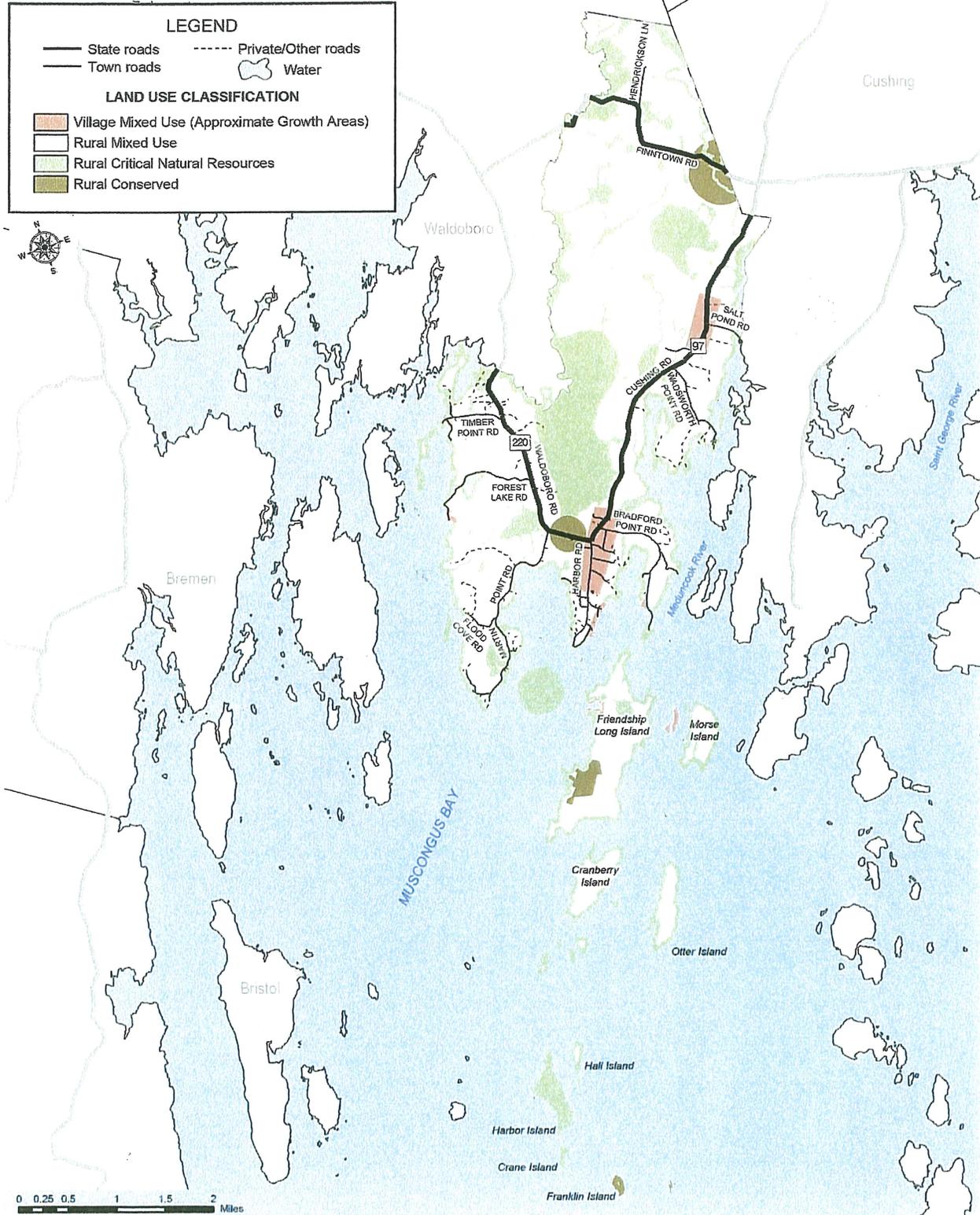
# Future Land Use

**LEGEND**

— State roads      - - - - Private/Other roads  
 — Town roads      [Water symbol] Water

**LAND USE CLASSIFICATION**

- [Orange box] Village Mixed Use (Approximate Growth Areas)
- [Light Green box] Rural Mixed Use
- [Light Blue box] Rural Critical Natural Resources
- [Dark Green box] Rural Conserved



Sources: Town of Friendship, NRCS, USFWS, Maine IF&W, MNAP, MEDOT, MGS, MEGIS

## HOUSING

### Introduction

This chapter identifies and analyzes housing trends, including tenure, type, age and affordability, and forecasts housing needs for the planning period.

### *State Goal/ Minimum Policies*

*To encourage and promote affordable, decent housing opportunities for all Maine citizens.*

### Analyses

- (1) *How many additional housing units (if any), including rental units, will be necessary to accommodate projected population and demographic changes during the planning period?*

As noted in the Population and Demographics Chapter, the State forecasts that Friendship's population will increase to 1,153 persons in 2025 and then decline to 1,143 in 2030. The Town's average household size has decreased over several decades. In 2014, it was estimated at 2.25 persons down from 2.49 in 1990. If that trend continues, the 2026 average household size could be 2.1 persons. With a projected population for planning purposes of up to 1,200 people by the year 2026, 572 housing units would be needed for occupancy. In 2014, the Census estimated there were 470 occupied housing units in Friendship out of 939 total housing units (occupied and vacant). Therefore, up to an additional 102 units would be needed for year-round use by 2026.

The Census records that 121 homes were built in Town from 1990 to 2014, for an annual average of about five units. From 2005 to 2014, there were 55 housing unit permits issued. If 102 units are built between 2016 to 2026, it would be significantly more than the amount of growth seen during the previous decade, a period of economic recession affecting the housing market. For planning purposes, an estimated 72 units of new housing is forecast based upon longer term trends, for a projected total of 1,011 total units (occupied and vacant) by the year 2026. Some seasonal units currently classified by the Census as vacant could be converted/returned to year-round use, offsetting the need for up to an estimated 30 new units. However, it is also likely that new seasonal housing will be constructed in addition to the construction of new year-round units.

In the 2014 Census estimates, there were 34 units of renter occupied housing in Friendship, which was 7.2% of the total estimated occupied housing stock. It is possible that rental housing could increase to 9.1% of total occupied housing over the next ten years, and if it does, that would mean 18 new renter occupied units would be constructed out of the total of additional units of new housing projected.

- (2) *Is housing, including rental housing, affordable to those earning the median income in the region? Is housing affordable to those earning 80% of the median income? If not, review local and regional efforts to address issue.*

Town-level housing affordability data for Friendship from MaineHousing, also known as the Maine State Housing Authority, indicates that in 2015, the median income household could afford 114% of the median home sale price, but that 217 households or 43.6% were unable to afford the median home price. At the regional level, the median income earner in Knox County could afford about 106% of the median home sale price in 2015.

The American Community Survey of the Census 2014 estimates that 101 households (42.3% of households with a mortgage) in Friendship pay 30% or more of their monthly income on housing. Paying more than 30% of one's income is generally considered unaffordable. For Knox County, 37.5% of households with a mortgage pay 30% or more.

For those without a mortgage in Friendship, 30 households (15.4% of households without a mortgage) pay 30% or more of their income on housing. For Knox County, 20.6% of households without a mortgage pay more than 30% of their income on housing.

For those who rent their homes in Friendship, 13 households (48.1% of occupied rental units) pay 30% or more on housing. For Knox County, that percentage is 46.6%. Accordingly, almost half of all renters are paying more for their housing than is generally considered affordable.

Friendship's housing stock includes 1.9% multi-unit housing, while Knox County had 12.3% in 2014. At 8.2%, the Town has a somewhat higher percentage of mobile homes as a proportion of its total housing than Knox County (7.8%). By definition, the State considers mobile homes as a form of affordable housing.

The Land Use Ordinance, amended in 2003, allows single-family dwelling units including mobile homes on individual lots town-wide with the exception of these two small shoreland districts: commercial fisheries and marine activities. Multi-units are allowed town-wide with the exception of these shoreland districts: stream protection, resource protection, commercial fisheries, and marine activities. Forty-thousand square feet is the minimum lot area per dwelling unit. Mobile home parks are allowed town-wide, excluding resource protection districts.

Of those who responded to the question on affordable housing included in the public opinion survey conducted for this comprehensive plan, --- saw the lack of affordable housing as a problem.

See the Conditions and Trends section for the number of subsidized units in Town and for a description of regional affordable housing efforts.

- (3) *Are seasonal homes being converted to year-round use or vice-versa? What impact does this have on the community?*

Friendship had an estimated 335 seasonal housing units in 2010 and 421 units in 2014. Some of this difference is due to the margin of error in Census counts in 2014 and undercounts in 2010, rather than significant growth in this category during this five-year period. The Planning Board/Code Enforcement Officer reports that since 2010 there have been few conversions of seasonal units to year-round occupancy and no conversions of year-round housing to seasonal use. While the Town does not actively monitor occupancy, there has been no impact on the community from conversions.

If the housing unit conversions to year-round use accelerate, there may be pressure for the Town to plow more roads for the convenience of residents and for emergency response access. This would increase municipal costs of winter maintenance and of general road maintenance due to the accelerated deterioration of roads that previously were unused during the winter and were not subject to damage from heavy vehicles and snowplows. See the Transportation Chapter for more information.

- (4) *Will additional low and moderate income family, senior, or assisted living housing be necessary to meet projected needs for the community? Will these needs be met locally or regionally?*

A large portion of the forecasted population change in Friendship will be an increase in the older age groups. The demand for housing to accommodate the needs of the elderly will increase. There are three subsidized housing units (vouchers) in Town as of 2011. The construction of additional facilities including assisted living could be used to meet future local demand. At present, more options for elderly housing including assisted living facilities are found in the larger service center communities of Rockland and Waldoboro. Given the efficiencies of scale required by federal funding agencies for elderly and subsidized housing projects, the location of medical facilities in Rockland and Rockport, proximity to social services and shopping amenities, and the existing range of housing stock, it is likely that service center communities will continue to provide the majority of the region's subsidized units, especially for the elderly population.

- (5) *Are there other major housing issues in the community, such as substandard housing?*

For Friendship in 2014, an estimated 0.4% of housing units lacked complete kitchens, while none lacked complete plumbing. The Code Enforcement Officer believes that these are seasonal units. The Code Enforcement Office records indicate a few substandard housing units in which there are current and ongoing violations of life safety codes that endanger occupants.

- (6) *How do existing local regulations encourage or discourage the development of affordable/workforce housing?*

Statewide, affordable housing tends to be located on lots of 20,000 square feet or smaller, and/or as part of multi-unit development with public water and connections to sewer or community wastewater systems. The Friendship village area has a public water supply. There are no public sewers in Friendship. As noted, the current minimum lot area for residential dwellings for Friendship is 40,000 square feet. The allowance of mobile homes on individual lots town wide and multi-unit housing in certain areas provides for limited affordable housing opportunities outside of shoreland areas.

**Conditions and Trends**

*Minimum data required to address Analyses:*

- (1) *The community's Comprehensive Planning Housing Data Set prepared and provided to the community by the Maine State Housing Authority, and the Office, or their designees.*

From 1990 to 2014, the total number of housing units increased by about 14.8% (+121 units) in Friendship, while the Town's year-round population decreased by an estimated 3.8% (42 persons) during the same period. There has been an increase of 20.6% in seasonal housing units (+72 units) with a small increase in their proportion of the total housing stock from 42.7% of total housing in 1990 to 44.8% in 2014.

<b>Housing Units in Friendship</b>					
<b>Units by Tenure</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2014</b>	<b>Percent Change</b>
Total Units	818	849	896	939	14.8%
Occupied	442	508	508	470	6.3%
Vacant	376	341	388	469	24.7%
- Vacant, for rent	3	4	12	0	-100.0%
- Vacant, for sale only	4	6	13	9	125.0%
- Vacant, rented or sold, not occupied	12	5	5	8	-33.3%
- For seasonal, recreational, occasional use	349	300	335	421	20.6%
- All other vacant	8	26	23	31	287.5%

Sources: US Census 1990, 2000, 2010, American Community Survey 5-year estimate 2010-2014

The increase in the number of housing units has occurred at a faster rate than the growth of population for Knox County. Total population grew by about 9.2% from 1990 to 2014 countywide, while housing grew by 25.4%. Growth in both year-round and seasonal housing has been notable. Seasonal housing comprised about 21.0% of the County's total housing stock in 2014, with much of that housing in coastal communities.

<b>Housing Units in Knox County</b>					
<b>Units by Tenure</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2014</b>	<b>Percent Change</b>
Total Units	19,009	21,612	23,744	23,838	25.4%
Occupied	14,344	16,608	17,258	17,038	18.8%
Vacant	4,665	5,004	6,486	6,800	45.8%
- Vacant, for rent	389	272	502	323	-17.0%
- Vacant, for sale only	239	163	372	137	-42.7%
- Vacant, rented or sold, not occupied	115	168	138	280	143.5%
- For seasonal, recreational, occasional use	3,541	4,054	4,828	4,997	41.1%
- All other vacant	381	347	646	1,063	179.0%

Sources: US Census 1990, 2000, 2010, American Community Survey 5-year estimate 2010-2014

The average household size has decreased at the town and county level, as it has statewide and nationally.

<b>Average Household Size</b>		
<b>Year</b>	<b>Friendship</b>	<b>Knox County</b>
1990	2.49	2.45
2000	2.37	2.31
2010	2.27	2.22
2013	2.22	2.28
2014	2.25	2.26
% Change	-9.6%	-7.8%

Sources: US Census, American Community Survey 5-year estimates 2009-2013 and 2010-2014

In 2014, about 89.9% of the Town's housing stock was composed of single-family units (detached and attached). The County's housing stock was 79.9% single-family units (attached and detached), while the State's was 71.9% (attached and detached). Friendship's housing stock includes 1.9% multi-unit housing, while Knox County has 12.3% and the State has 19.2%. At 8.2%, the Town has a somewhat higher percentage of mobile homes as a proportion of its total housing than Knox County (7.8%) and the State (8.8%).

<b>Estimate of Units by Structure Type 2014</b>						
<b>Category</b>	<b>Friendship</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Total Est. Units	939	100%	23,838	100%	724,685	100%
1, detached	831	88.5%	18,612	78.1%	504,372	69.6%
1, attached	13	1.4%	419	1.8%	16,377	2.3%
2	18	1.9%	1,044	4.4%	37,843	5.2%
3 or 4	0	0.0%	865	3.6%	40,089	5.5%
5 to 9	0	0.0%	539	2.3%	27,509	3.8%
10 to 19	0	0.0%	150	0.6%	11,847	1.6%
20 or more	0	0.0%	344	1.4%	22,318	3.1%
Mobile home	77	8.2%	1,865	7.8%	64,033	8.8%
Boat, RV, van, etc.	0	0.0%	0	0.0%	297	0.0%

Source: Census, American Community Survey 5-year estimate 2010-2014

According to the US Department of Housing and Urban Development, from 2005 to 2014, 55 housing unit permits were issued in Friendship. All were for units in single-family structures. Permit activity was greatest in 2006 to 2008.

<b>Housing Unit Building Permits Issued in Friendship</b>												
<b>Units</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Sum</b>	<b>Avg</b>
<b>Total</b>	5	15	9	10	2	2	4	4	2	2	55	5.5
<b>In Single-Family Structures</b>	5	15	9	10	2	2	4	4	2	2	55	5.5
<b>In Multi-Family Structures</b>	0	0	0	0	0	0	0	0	0	0	0	0

Source: US Department of Housing and Urban Development

From 2005 to 2014, 1,393 housing unit permits were issued in Knox County. At the County level, about 5.2% of all permits were for multi-family structures. During this period, most building permit activity occurred from 2004-2006; however, most multi-unit permit activity occurred in 2011-2012.

Housing Unit Building Permits Issued in Knox County												
Units	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Sum	Avg
<b>Total</b>	268	209	145	132	105	75	124	142	92	101	1,393	139.3
<b>In Single-Family Structures</b>	262	207	143	128	103	73	113	108	82	101	1,320	132.0
<b>In Multi-Family Structures</b>	6	2	2	4	2	2	11	34	10	0	73	7.3

Source: US Department of Housing and Urban Development

According to the Planning Board/Code Enforcement Officer, between 2000 and 2014, a good portion of Friendship's housing constructed/located in Town was for single-family homes (stick-built and modular), while a significant number were for mobile homes (single and doublewide, manufactured with chassis). No multi-family units were constructed during this period. Building activity was stronger earlier in the decade prior to the recession. Most new homes were built on these roads: Bradford Point Rd, Wadsworth Point Rd, and Waldoboro Rd (Route 220), especially near the Goose River.

Planning board records indicate that no major subdivisions involving the construction of new roadways were approved between 2000 and 2016. Just a few lots were subdivided as minor subdivisions.

About 50.1% of Friendship's housing stock was occupied in 2014, as compared with 71.5% for the County and 76.3% for the State. Note: The Census categorizes seasonal homes as vacant. The homeowner vacancy rate was higher for the Town than for the County and State, indicating a modest supply of housing for purchase at the town level. However, Friendship had a 0% rental vacancy rate indicating a lack of available rental housing, as compared with 7.5% for the County and 7.2% for the State.

Estimate of Housing Occupancy 2014						
Category	Friendship		Knox County		Maine	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total housing units	939	100%	23,838	100%	724,685	100%
Occupied housing units	470	50.1%	17,038	71.5%	553,086	76.3%
Vacant housing units	469	49.9%	6,800	28.5%	171,599	23.7%
Homeowner vacancy rate	2.0%		1.0%		2.2%	
Rental vacancy rate	0.0%		7.5%		7.2%	

Source: US Census, American Community Survey 5-year estimate 2010-2014

About 92.8% of occupied housing in Friendship was owner occupied in 2014, as compared with 78.0% in Knox County and 71.4% for the State. The balance of occupied housing was renter occupied.

<b>Estimate of Housing Tenure 2014</b>						
<b>Category</b>	<b>Friendship</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Occupied housing units	470	100%	17,038	100%	553,086	100%
Owner-occupied	436	92.8%	13,293	78.0%	395,074	71.4%
Renter-occupied	34	7.2%	3,745	22.0%	158,012	28.6%

Source: US Census, American Community Survey 5-year estimate 2010-2014

About 34.7% of total housing in Friendship and in Knox County was built before 1939. For the State that figure was 25.7%. Friendship has a relatively older housing stock than does the State. Substandard housing is more common with older units.

<b>Estimate of Year Structure Built 2014</b>						
<b>Category</b>	<b>Friendship</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Total housing units	939	100%	23,838	100%	724,685	100%
Built 2010 or later	3	0.3%	159	0.7%	4,855	0.7%
Built 2000 to 2009	81	8.6%	3,067	12.9%	89,273	12.3%
Built 1990 to 1999	137	14.6%	2,629	11.0%	89,077	12.3%
Built 1980 to 1989	127	13.5%	3,257	13.7%	108,631	15.0%
Built 1970 to 1979	97	10.3%	2,978	12.5%	102,859	14.2%
Built 1960 to 1969	81	8.6%	1,381	5.8%	53,365	7.4%
Built 1950 to 1959	36	3.8%	1,282	5.4%	54,466	7.5%
Built 1940 to 1949	51	5.4%	815	3.4%	35,826	4.9%
Built 1939 or earlier	326	34.7%	8,270	34.7%	186,333	25.7%

Source: US Census, American Community Survey 5-year estimate 2010-2014

For Friendship, no housing units are estimated to lack complete plumbing while 0.4% lacked complete kitchens. The Code Enforcement Officer believes that these represented seasonal units/camps. For Knox County, 0.7% units lacked complete plumbing and 0.6% lacked complete kitchens. For the State, 0.9% lacked complete plumbing and 1.1% units lacked complete kitchens.

<b>Estimate of Kitchen and Plumbing in Housing Units 2014</b>						
<b>Category</b>	<b>Friendship</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Occupied housing units	470	100%	17,038	100%	553,086	100%
Lacking complete plumbing facilities	0	0.0%	125	0.7%	4,736	0.9%
Lacking complete kitchen facilities	2	0.4%	105	0.6%	6,034	1.1%

Source: US Census, American Community Survey 5-year estimate 2010-2014

The median income of Friendship residents has increased since 2000 but not as much as the increase for Knox County residents as a whole. Most recently, the gap between the Town and County has narrowed.

<b>Median Household Income</b>	<b>Friendship</b>	<b>Knox County</b>	<b>Maine</b>
<b>2000</b>	\$39,348	\$36,774	\$37,240
<b>2010</b>	\$48,026	\$45,264	\$46,933
<b>2013</b>	\$48,750	\$49,755	\$48,453
<b>2014</b>	\$50,000	\$50,515	\$48,804
<b>Percent Change</b>	27.1%	37.4%	31.1%

Sources: U.S. Census, American Community Survey (5-year estimates 2009-2013 and 2010-2014)

Friendship's poverty rate is significantly lower than the rate for Knox County and the State as a whole. See the Economy Chapter for more information.

<b>Individuals Below Poverty Level</b>			
<b>Year</b>	<b>Friendship</b>	<b>Knox County</b>	<b>Maine</b>
2000	11.0%	10.1%	10.9%
2010	10.9%	12.5%	12.6%
2013	6.0%	10.8%	13.6%
2014	5.5%	11.3%	13.9%

Source: U.S. Census, American Community Survey (5-year estimates 2009-2013 and 2010-2014)

<b>Families Below Poverty Level</b>			
<b>Year</b>	<b>Friendship</b>	<b>Knox County</b>	<b>Maine</b>
2000	8.3%	6.4%	7.8%
2010	7.4%	7.9%	8.4%
2013	1.7%	6.5%	9.1%
2014	1.2%	7.2%	9.4%

Source: U.S. Census, American Community Survey (5-year estimates 2009-2013 and 2010-2014)

In 2011, the most recent year of data provided by MaineHousing for the Town, Friendship had three subsidized housing units: vouchers. Countywide in 2013, there were 1,073 subsidized units, of which 472 were designated for senior citizens.

<b>Subsidized Housing Units</b>			
<b>Category</b>	<b>Friendship</b>	<b>Knox County</b>	
	<b>2011</b>	<b>2011</b>	<b>2013</b>
Disabled Units	0	96	96
Family Units	0	312	309
Housing Choice Vouchers	3	276	166
Senior Units	0	480	472
Special Needs Units	0	0	30
<b>Total</b>	<b>3</b>	<b>1,164</b>	<b>1,073</b>

Source: MaineHousing, Maine State Housing Authority

The median value of surveyed occupied homes in Friendship is \$22,800 lower than Knox County and \$3,100 lower than the State median.

<b>Estimated Value of Owner Occupied Housing 2014</b>						
<b>Category</b>	<b>Friendship</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Owner-occupied units surveyed	436	100%	13,293	100%	395,074	100%
Less than \$50,000	26	6.0%	804	6.0%	32,957	8.3%
\$50,000 to \$99,999	63	14.4%	1,183	8.9%	55,951	14.2%
\$100,000 to \$149,999	61	14.0%	2,143	16.1%	66,302	16.8%
\$150,000 to \$199,999	140	32.1%	2,816	21.2%	77,438	19.6%
\$200,000 to \$299,999	51	11.7%	2,993	22.5%	89,693	22.7%
\$300,000 to \$499,999	66	15.1%	2,135	16.1%	51,345	13.0%
\$500,000 to \$999,999	26	6.0%	962	7.2%	17,049	4.3%
\$1,000,000 or more	3	0.7%	257	1.9%	4,339	1.1%
Median (dollars)	\$170,500	(X)	\$193,300	(X)	\$173,600	(X)

Source: US Census, American Community Survey 5-year estimate 2010-2014

About 101 households (42.3% of households with a mortgage) in Friendship pay 30% or more of their monthly income on housing. Paying more than 30% of one's income is generally considered unaffordable. For Knox County, 37.5% of households pay 30% or more, and for the State, 33.4% with a mortgage pay 30% or more of their income on housing.

For those without a mortgage in Friendship, 30 households (15.4% of households without a mortgage) pay 30% or more of their income on housing. For Knox County, 20.6% pay more than 30%, and for the State 17.4% of those without a mortgage pay 30% or more of their income on housing.

Estimated Selected Monthly Owner Costs As A Percentage Of Household Income (SMOCAPI) 2014						
Category	Friendship		Knox County		Maine	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	239	100%	7,938	100%	250,899	100%
Less than 20.0 percent	90	37.7%	2,647	33.3%	95,997	38.3%
20.0 to 24.9 percent	32	13.4%	1,167	14.7%	40,794	16.3%
25.0 to 29.9 percent	16	6.7%	1,146	14.4%	30,352	12.1%
30.0 to 34.9 percent	3	1.3%	599	7.5%	20,568	8.2%
35.0 percent or more	98	41.0%	2,379	30.0%	63,188	25.2%
Not computed	0	(X)	88	(X)	858	(X)
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	194	100%	5,199	100%	142,000	100%
Less than 10.0 percent	66	34.0%	1,605	30.9%	48,291	34.0%
10.0 to 14.9 percent	26	13.4%	1,153	22.2%	28,530	20.1%
15.0 to 19.9 percent	36	18.6%	749	14.4%	19,326	13.6%
20.0 to 24.9 percent	13	6.7%	362	7.0%	13,097	9.2%
25.0 to 29.9 percent	23	11.9%	259	5.0%	8,147	5.7%
30.0 to 34.9 percent	3	1.5%	227	4.4%	6,198	4.4%
35.0 percent or more	27	13.9%	844	16.2%	18,411	13.0%
Not computed	3	(X)	68	(X)	1,317	(X)

Source: US Census, American Community Survey 5-year estimate 2010-2014

The monthly median rent paid in Friendship is significantly higher than for Knox County and for the State.

Estimated Gross Rent 2014						
Category	Friendship		Knox County		Maine	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Occupied units paying rent	27	100%	3,417	100%	146,634	100%
Less than \$200	0	0.0%	42	1.2%	3,685	2.5%
\$200 to \$299	0	0.0%	212	6.2%	9,432	6.4%
\$300 to \$499	0	0.0%	299	8.8%	15,093	10.3%
\$500 to \$749	0	0.0%	1,140	33.4%	40,788	27.8%
\$750 to \$999	10	37.0%	774	22.7%	39,629	27.0%
\$1,000 to \$1,499	14	51.9%	862	25.2%	29,535	20.1%
\$1,500 or more	3	11.1%	88	2.6%	8,472	5.8%
Median (dollars)	\$1,219	(X)	\$754	(X)	\$772	(X)
No rent paid	7	(X)	328	(X)	11,378	(X)

Source: US Census, American Community Survey 5-year estimate 2010-2014

For those who rent their homes in Friendship, 13 households (48.1% of occupied rental units) pay 30% or more on housing. For Knox County, that percentage is 46.6% and for the State, it is 51.9%. Nearly half of all renters in Friendship are paying more for their housing than is generally considered affordable.

Estimated Gross Rent as a Percentage of Household Income (GRAPI) 2014						
Category	Friendship		Knox County		Maine	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Occupied units paying rent (excluding units where GRAPI cannot be computed)	27	100%	3,387	100%	144,502	100%
Less than 15.0 percent	7	25.9%	452	13.3%	15,811	10.9%
15.0 to 19.9 percent	0	0.0%	481	14.2%	17,170	11.9%
20.0 to 24.9 percent	3	11.1%	472	13.9%	17,252	11.9%
25.0 to 29.9 percent	4	14.8%	405	12.0%	19,171	13.3%
30.0 to 34.9 percent	0	0.0%	429	12.7%	14,232	9.8%
35.0 percent or more	13	48.1%	1,148	33.9%	60,866	42.1%
Not computed	7	(X)	358	(X)	13,510	(X)

Source: US Census, American Community Survey 5-year estimate 2010-2014

In 2015, the median income earner in Friendship could afford 114% of the median home sale price. In the Waldoboro Labor Market Area Housing Market, which includes Friendship, the median income earner could afford about 113% of the median home sale price. For Knox County, that figure is 106% and for the State, it is 103%. The next table also shows the income needed to afford recent home sale prices, and home prices that are affordable for recent income figures. Home sale prices are for units sold through the multiple-listing service. These sales do not include homes and lands sold directly by the owner without the use of a real estate agent, which tend to fetch lower prices and are often sold or given to relatives.

<b>Homeownership Affordability Index in 2015</b>						
<b>Area</b>	<b>Affordability Index</b>	<b>Median Home Sale Price</b>	<b>Median Income</b>	<b>Income needed to afford median home price</b>	<b>Home price affordable at median income</b>	<b>Households unable to afford median home price</b>
Friendship	1.14	\$180,000	\$54,479	\$47,581	\$206,095	217 (43.6%)
Waldoboro LMA Housing Market	1.13	\$175,000	\$53,128	\$46,822	\$198,570	3,832 (43.9%)
Rockland Micropolitan Area	1.12	\$160,000	\$48,608	\$43,460	\$178,951	4,942 (45.3%)
Knox County	1.06	\$180,000	\$52,165	\$49,339	\$190,310	8,378 (48.3%)
Maine	1.03	\$176,000	\$50,703	\$49,352	\$180,816	281,724 (50.1%)

Source: MaineHousing, Maine State Housing Authority

Notes:

- The Homeownership Affordability Index is the ratio of Home Price Affordable at Median Income to Median Home Price. An index of less than 1 means the area is generally unaffordable - i.e., a household earning area median income could not cover the payment on a median priced home (30 year mortgage, taxes and insurance) using no more than 28% of gross income.
- The Waldoboro LMA includes Alna, Bremen, Bristol, Damariscotta, Friendship, Jefferson, Monhegan Plantation, Newcastle, Nobleboro, South Bristol, and Waldoboro.
- The Rockland Micropolitan Area includes Cushing, Owls Head, Rockland, Rockport, South Thomaston, Thomaston, and Warren.

In 2015, the median income earner in the Waldoboro Labor Market Area Housing Market, which includes Friendship, could afford about 93% of the median rent for a two-bedroom unit with utilities. For Knox County, that figure is 77% and for the State, it is 89%. The next table also shows rents that are affordable for recent income figures. The data suggests the potential of some overcrowding by low income families in small apartments at the labor market and county level. Town level renter affordability data for Friendship was not available from the Maine State Housing Authority.

<b>Renter Affordability Index in 2015</b>						
<b>Area</b>	<b>Affordability Index</b>	<b>Avg. 2 BR rent w/utilities</b>	<b>Renter Household Median Income</b>	<b>Income needed to afford avg. 2 BR rent</b>	<b>2 BR rent affordable to median income</b>	<b>Households unable to avg. 2 BR rent</b>
Waldoboro LMA Housing Market	0.93	\$940	\$34,802	\$37,581	\$870	880 (53.7%)
Rockland Micropolitan Area	0.77	\$990	\$30,449	\$39,597	\$761	1,874 (61.9%)
Knox County	0.84	\$964	\$32,222	\$38,551	\$806	2,603 (58.1%)
Maine	0.89	\$850	\$30,142	\$33,998	\$754	89,127 (55.4%)

Source: MaineHousing Maine State Housing Authority

Notes:

- The Rental Affordability Index is the ratio of 2-Bedroom Rent Affordable at Median Renter Income to Average 2-Bedroom Rent. An index of less than 1 means the area is generally unaffordable – i.e., a renter household earning area median renter income could not cover the cost of an average 2-bedroom apartment (including utilities) using no more than 30% of gross income.
- The Waldoboro LMA includes Alna, Bremen, Bristol, Damariscotta, Friendship, Jefferson, Monhegan Plantation, Newcastle, Nobleboro, South Bristol, and Waldoboro.
- The Rockland Micropolitan Area includes Cushing, Owls Head, Rockland, Rockport, South Thomaston, Thomaston, and Warren.

Information on Friendship homeowner and rental households earning up to 80% of the Household Area Median Income was not available from the Maine State Housing Authority.

(2) *Information on existing local and regional affordable/workforce housing coalitions or similar efforts.*

Local and regional agencies operate programs to assist Friendship residents. Through State and federal grants, private foundations and donations, Penquis operates the Head Start program, WIC (Women, Infants and Children) nutrition programs, as well as job training and retraining programs, family development and case management programs for low-income residents.

Penquis also provides several energy and housing programs in Knox County. These include the Home Energy Assistance Program (HEAP/Wx), Low Income Home Energy Assistance Program (LIHEAP), Department of Energy (DOE/Wx), Central Heating Improvement Program (CHIP),

Home Repair Network, Neighborhood Stabilization Program (NSP), among other programs. The types and amounts of assistance provided to Friendship residents are shown in the next table for the most recent year available.

<b>Penquis Services provided to Friendship residents for the year ending May 31, 2014</b>		
<b>Service</b>	<b>Households/Clients</b>	<b>Value</b>
Central Heating Improvement Program: Repairs or replaces faulty central heating systems.	1 Client	\$653
Emergency Crisis Intervention Program: Provides home heating assistance to income-eligible households that are in an emergency or energy crisis.	6 Households	\$2,290
Good Neighbor Heating Assistance: Provides 100 gallons of heating fuel to households whose income is 250% of the federal poverty level or less.	3 Households	\$972
Low-Income Home Energy: Assistance Program Assists income-eligible households with home heating costs.	40 Households	\$33,127
Weatherization: Applies weatherization techniques to eligible households to conserve energy.	1 Household	\$7,054
Total Value/Total Value Less Business and Mortgage Loans:	--	\$44,096

Source: Penquis

MaineHousing, also known as the Maine State Housing Authority, are the housing agents for tenant and/or project based rental assistance, providing Housing Choice Vouchers (Section 8 Housing) which includes subsidized rents for qualifying families. Families contribute between 30% and 39% of their income toward rent. Housing must meet Housing and Urban Development quality standards and Fair Market Rent guidelines. Income-eligible individuals who are handicapped, disabled or 62 years of age or older or income-eligible families of two or more persons.

Pen Bay Healthcare provides comfort, care and support to people in their homes through Knowal-Lin Home Care and Hospice. Their services include nurses, rehabilitation therapists, social workers and home health aides, home hospice, chronic disease management, pediatric, tele-health programs and visiting volunteers, among other services.

(3) *A summary of local regulations that affect the development of affordable/workforce housing.*

The Land Use Ordinance, amended in 2003, allows single-family dwelling units including mobile homes on individual lots town-wide with the exception of these two small shoreland districts: commercial fisheries and marine activities. Residential multi-units are allowed town-wide with the exception of these shoreland districts: stream protection, resource protection, commercial fisheries, and marine activities. Forty-thousand square feet is the minimum lot area per dwelling unit. Mobile home parks are allowed town-wide, excluding resource protection districts.

<b>Friendship Land Use Dimensional Standards</b>					
<b>Area</b>	<b>Minimum lot area per dwelling unit</b>	<b>Street frontage minimum</b>	<b>Front setback minimum</b>	<b>Side / Rear setback minimum</b>	<b>Minimum shore frontage per dwelling unit</b>
			Applies only to non-residential/commercial/industrial, and multifamily structures		
Town wide, including applicable shoreland zones	40,000 square feet	100 feet	50 feet from road centerline	20 feet	150 feet within shoreland zone adjacent to tidal area; 200 feet within shoreland zone adjacent to non-tidal area

Sources: Town of Friendship Land Use Ordinance 2003 and Shoreland Zoning Ordinance, 2008

Affordable housing tends to be located on lots of 20,000 square feet or smaller, and/or as part of multi-unit residential development with public water and connections to sewer or community wastewater systems. Given the high value of shoreland lots, the lack of town sewer, and a 40,000-square foot minimum lot size, affordable housing opportunities have been limited, often to individual mobile homes or modest modular homes on inland lots. As noted above, Friendship has a smaller proportion of multi-units than Knox County, but proportionally somewhat more mobile homes.

Of those who responded to the public survey question on whether town ordinances should encourage certain types of housing if population growth occurs, support was expressed as follows: ---. See the Survey Chapter for more information.

**Policies**

- (1) To encourage and promote adequate workforce housing to support the community's and region's economic development.
- (2) To ensure that land use controls encourage the development of quality affordable housing, including rental housing.
- (3) To encourage and support the efforts of the regional housing coalitions in addressing affordable and workforce housing needs.

**Strategies**

Housing Strategies	Responsible Parties	Timeframe
(1) Maintain, enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to encourage the development of affordable/workforce housing.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Immediate
(2) Maintain, enact or amend ordinances to allow the addition of at least one accessory apartment per dwelling unit in growth areas and to promote conservation/cluster affordable housing in such areas, subject to site suitability.	Planning Board, Selectmen, Ordinance Review Committee, and Town Meeting Vote	Immediate
(3) Create or continue to support a community affordable/workforce housing committee and/or regional affordable housing coalition. <ul style="list-style-type: none"> <li>• Establish a Town committee to review affordable housing needs and to work with the state and regional housing authorities to seek information to be better able to work with our young people and elderly and less fortunate and to see if there are programs to meet both their housing needs.</li> </ul>	Selectmen	Midterm
(4) Designate a location(s) in growth areas where mobile home parks are allowed pursuant to 30-A M.R.S.A. §4358(3)(M) and where manufactured housing is allowed pursuant to 30-A M.R.S.A. §4358(2). Note: Allowed town-wide, excluding resource protection districts.	Planning Board, Ordinance Review Committee, Selectmen and Town Meeting Vote	Long Term
(5) Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs. <ul style="list-style-type: none"> <li>• To meet housing needs of the elderly, the Town will encourage participation in programs, grants and projects, within the Town or the region to insure sufficient affordable housing options for its elderly citizens</li> </ul>	Selectmen and Town Clerk	Immediate and Ongoing

Housing: Strategies	Responsible Parties	Timeframe
<p>(6) <i>Seek to achieve a level of at least 10% of new residential development built or placed during the next decade be affordable.</i></p> <ul style="list-style-type: none"> <li>• The Town will continue to encourage affordable housing opportunities by continuing to allow a mixture of appropriate housing types, including cluster/conservation subdivisions, multi-units, and accessory (in-law) apartments.</li> <li>• The Town will welcome and encourage participation in programs, grants (Community Development Block Grant [CDBG], housing assistance and rehabilitation programs) and projects for the construction of subsidized workforce housing within the Town, and grants to homeowners for improvements to energy efficiency, habitability, etc.</li> </ul>	Planning Board Selectmen, Ordinance Review Committee, and Town Meeting Vote	Midterm and Long Term

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

## FISCAL CAPACITY AND CAPITAL INVESTMENT PLAN

### Introduction

Municipalities must be able to determine the expenditures necessary to provide basic services and the impact that this spending will have on townspeople. The primary funding source for municipal government is property tax revenue. Although the priorities of the Town may change from one election year to another, stable municipal finances are always a fundamental responsibility of Town government. It is important for Friendship to handle diligently all yearly expenditures while at the same time plan for the Town's long-term objectives. As is the case with any business, the physical assets of Friendship must be properly maintained through capital reserve accounts to protect the Town's continued economic health.

### State Goal

*To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.*

### Analyses

(1) *How will future capital investments identified in the plan be funded?*

Capital investments will continue to be funded through capital reserve funds supported by property tax revenues town-wide, intergovernmental revenues (State aid), grants and loans from federal, and State and private sources.

(2) *If the community plans to borrow to pay for capital investments, does the community have sufficient borrowing capacity to obtain the necessary funds?*

The community has sufficient borrowing capacity. In fiscal year 2015, total municipal debt was well below the statutory limits as set forth in Title 30-A M.R.S.A. Section 5702.

(3) *Have efforts been made by the community to participate in or explore sharing capital investments with neighboring communities? If so, what efforts have been made?*

As noted in the Public Facilities and Services Chapter and the Regional Coordination Program Chapter, the Town does cooperate with neighboring communities, multi-community quasi-municipal organizations, and with Knox County in the provision of services (public education, police protection, fire department, emergency medical services, and municipal solid waste management, among other services). Sharing of capital investments has included the following: replacement of the Salt Pond Bridge, which connects Cushing and Friendship.

## Conditions and Trends

Minimum data required to address Analyses:

- (1) Identify community revenues and expenditures by category for the last five (5) years and explain trends.

Total municipal revenues rose 6.2% over the last five years. Property taxes increased 4.3%, comprising 86.1% of total revenues in 2011 and 84.5% in 2015. Excise taxes increased 29.8%, comprising 7.7% of total revenues in 2011 and 9.4% in 2015. Intergovernmental revenue (State aid) decreased 29.4% overall, combining the five subcategories, comprising 3.8% of total revenues in 2011 and 2.5% in 2015. Each subcategory of intergovernmental revenue decreased. Revenues from charges for services, licenses and permits, and other revenues increased.

Actual Revenues for the years ending December 31st						
Categories	2011	2012	2013	2014	2015	Percent Change
Property Taxes	2,245,724.71	2,206,063.70	2,318,402.78	2,352,135.25	2,342,781.37	4.3%
Excise Taxes	200,783.10	201,937.29	222,059.20	259,459.84	260,673.39	29.8%
Intergovernmental:						
-State revenue sharing	41,936.71	41,136.37	33,631.80	23,635.36	27,202.68	-35.1%
-Homestead reimburse	18,771.00	17,923.00	17,280.00	19,143.00	17,714.00	-5.6%
-Local road assist	19,788.00	19,788.00	26,226.00	14,976.00	15,132.00	-23.5%
-Veteran's exemption	910.00	854.00	1,012.00	753.00	714.00	-21.5%
-Other	17,065.03	13,654.85	6,092.71	3,777.92	8,774.41	-48.6%
Investment income	6,022.53	4,037.35	4,494.29	1,538.34	697.49	-88.4%
Interest/charges on liens	12,270.36	11,810.01	8,937.27	16,855.81	10,427.96	-15.0%
Charges for services	10,751.84	7,940.70	8,554.66	20,193.04	20,902.90	94.4%
Licenses and permits	9,594.03	12,919.75	9,464.05	9,188.20	10,466.20	9.1%
Other revenues (misc)	25,233.56	196,191.52	87,689.49	23,978.56	55,642.33	120.5%
<b>Total</b>	<b>2,608,850.87</b>	<b>2,734,256.54</b>	<b>2,743,844.25</b>	<b>2,745,634.32</b>	<b>2,771,128.73</b>	<b>6.2%</b>

Source: Town Annual Reports  
 Note: Percentages are rounded.

Total expenditures increased 12.1% over the last five years. The largest expense, education (over which municipal government has no control) increased 14.6% from 2011 to 2015, comprising 59.2% of total expenditures in 2011 and 60.5% of total expenditures in 2015. General government increased 10.5% over the same period, comprising 5.0% of total expenditures in 2011 and 4.9% in 2015. Protection (police and fire) increased 18.6% over the period, comprising 6.2% in 2011 and 6.6% in 2015. Public Works decreased 5.9% over the same period, comprising 11.8% of total expenditures in 2011 and 9.9% in 2015.

Actual Expenditures for the years ending December 31st						
Categories	2011	2012	2013	2014	2015	Percent Change
General Government	128,909.35	136,909.56	126,707.63	130,173.82	142,498.05	10.5%
Protection	162,027.65	187,214.71	440,648.59	173,334.37	192,137.36	18.6%
Public Works	307,753.86	166,833.22	130,829.36	163,999.78	289,720.97	-5.9%
Health and sanitation	78,998.00	72,526.52	76,468.46	80,528.02	80,674.00	2.1%
Health and welfare	8,623.05	10,885.79	16,170.28	8,253.61	11,023.15	27.8%
Buildings	43,562.65	45,730.65	45,820.30	45,955.51	60,291.87	38.4%
Community development	4,925.40	4,210.06	3,141.91	8,594.01	7,764.45	57.6%
Debt service	44,963.61	44,963.61	79,380.00	62,855.82	50,813.49	13.0%
Education	1,540,157.58	1,612,649.22	1,666,212.40	1,704,610.93	1,764,947.68	14.6%
County tax	230,924.87	227,267.85	240,820.62	228,558.70	229,919.69	-0.4%
Unclassified	52,591.77	81,509.23	62,811.86	55,562.32	88,846.18	68.9%
<b>Total</b>	<b>2,603,437.79</b>	<b>2,590,700.42</b>	<b>2,889,011.41</b>	<b>2,662,426.89</b>	<b>2,918,636.89</b>	<b>12.1%</b>
Excess (deficiency) of revenue	5,413.08	143,556.12	(145,167.16)	83,207.43	(147,508.16)	-2,825.0%

Source: Town Annual Reports  
 Note: Percentages are rounded.

(2) Describe means of funding capital items (reserve funds, bonding, etc.) and identify any outside funding sources.

Capital investments are funded through capital reserve project funds supported by property tax revenues town-wide, intergovernmental revenues (State aid), grants and loans from federal and State sources, and from municipal bonds. The Town does not have tax increment financing districts. Non-governmental (outside) funding sources have recently included gifts, donations, and grants, e.g., a Maine DEP grant to replace a failing septic system.

(3) Identify local and state valuations and local mil rates for the last five (5) years.

The local valuation of Friendship increased 2.1% in the most recent five-year period for which this information is available. The value of exempt properties did not increase over the period, comprising 3.4% of the total valuations in 2011 and 3.3% in 2015.

<b>Friendship Local Valuations</b>						
<b>Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Percent Change</b>
Total Taxable	235,392,620	236,414,800	236,868,300	238,528,400	240,284,700	2.1%
Total Exempt	7,987,760	8,046,000	7,652,800	7,993,200	7,987,200	0.0%

Source: Town Annual Reports  
 Note: Percentages are rounded.

The Town's mil rate increased 3.7% in the last five years.

<b>Friendship Mil Rates</b>					
<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Percent Change</b>
9.5	9.3	9.8	9.8	9.85	3.7%

Source: Town Annual Reports  
 Note: Percentages are rounded.

The State valuation of the Town decreased 10% in the last five years.

<b>Friendship State Valuations</b>					
<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Percent Change</b>
264,400,000	263,450,000	261,800,000	248,050,000	\$237,950,000	-10.0%

Source: Maine Revenue Services  
 Note: Percentages are rounded.

- (4) *How does total municipal debt (including shares of county, school and utility) compare with the statutory and Maine Bond Bank recommended limits on such debt?*

Title 30-A M.R.S.A. Section 5702 contains a limitation on the amount of debt that municipalities may incur. A municipality cannot issue debt (for purposes other than school, storm or sanitary sewer, energy facility or for municipal airports) that would exceed 7.5% of the municipality's last full State valuation. The statute contains additional limits for school, storm or sanitary sewer, energy facility and for municipal airports. There is an overall debt limit for all types of debt of 15% of the municipality's last full State valuation. The Town has imposed a debt limit of ---% through ---. The Town has not exceeded the statutory limit.

<b>Friendship General Obligation Bonds and Notes</b>			
<b>Purpose</b>	<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Balance on 12/31/2015</b>
Governmental Activities	2016	1.888%	\$16,107.25

Source: Town Annual Report 2015

Note: The Maine Bond Bank has no set policy on the amount of total debt a municipality can or should have outstanding other than to be sure that the municipality is in compliance with the provisions of Maine law regarding limitations on local debt. The Maine Bond Bank looks at outstanding debt, both direct and contingent, from such perspectives as debt per capita, percentage of operating budget to debt service, and total debt among other factors.

## ***Capital Investment Plan***

*The comprehensive plan must include a capital investment plan that:*

- (1) Identifies and summarizes anticipated capital investment needs within the planning period in order to implement the comprehensive plan, including estimated costs and timing, and identifies which are municipal growth-related capital investments;*
- (2) Establishes general funding priorities among the community capital investments; and*
- (3) Identifies potential funding sources and funding mechanisms.*

For (1) through (3), see the table below titled Friendship Capital Investment Plan Summary 2016-2026.

### **Purpose and Definition**

The purpose of a capital investment plan (CIP) is to establish a framework for financing needed capital investments. A CIP guides budgeting and expenditures of tax revenues and identifies needs for which alternative sources of funding such as loans, grants or gifts will be sought.

Capital investments include the repair, renewal, replacement or purchase of capital items. Capital investments differ from operating expenses or consumables. The expense of consumables is ordinarily budgeted as operations. Capital investments generally have the following characteristics: they are relatively expensive (typically having an acquisition cost of \$5,000 or more); they usually do not recur annually; they last for several years (often having a useful life of three or more years); and they result in fixed assets. Capital items can include equipment and machinery, buildings, real property, utilities and long-term contracts and are funded through the establishment of financial reserves.

Capital investments are prioritized each year in the budget process based on the availability of funds and the political will of the community. A complete CIP describes expected yearly investment and allows for both changes in priorities and reduction of available funds. The CIP is intended to prevent a large capital investment from occurring in a single fiscal year. The unexpected purchase of a sizeable investment can overburden the tax rate and cause large fluctuations in tax bills from year to year. The annual provision for eventual replacement of capital investments depends on the useful life of the capital investments. It is important that capital investments be financially accounted for each fiscal year, minimizing later expenses.

For the purposes of this plan, the total costs have been recognized with an indication of the expected period for each item that is desired based upon priority ratings. The Town has drafted a capital investment plan to provide for a yearly allocation of available and applicable funds. Each year any necessary changes will be made to the CIP and it will be included in the annual budget. Each year the Budget Committee will review the funding requests and make a recommendation for Select Board review.

**Priority Rankings**

The capital investments identified below were assigned a priority based on the listed ratings. Logically, “A” investments would be implemented prior to “B” and so on. Lower priority items may be funded ahead of schedule if higher priority items have already been funded or are prohibitively expensive, or if other sources of revenue (such as donated funds) become available. In order to fund capital investment projects it is necessary to begin to identify funding sources and set aside funds in advance of the projected time of funding.

- A. Immediate need. A capital investment rated in this category would typically remedy a danger to public health, safety and welfare.*
- B. Necessary, to be accomplished within two to five years. A capital investment rated in this category would typically correct deficiencies in an existing facility or service.*
- C. Future investment or replacement, to be accomplished within five to ten years. A capital investment rated in this category would be desirable but is of no urgency. Funding would be flexible and there would be no immediate problem.*
- D. Desirable, but not necessarily feasible within the ten year period of this Comprehensive Plan.*

Projects referenced in this Comprehensive Plan and existing reserve accounts are the basis for this capital investment plan and have been incorporated into the table below. As well, State and federal mandates necessitating some of these projects have been noted in the table. The need for each project is shown in parentheses.

<b>Friendship Capital Investment Plan Summary 2017-2027</b>					
<b>Comprehensive Plan Chapter/Town Dept.</b>	<b>Anticipated Item and (Need)</b>	<b>Estimated Cost</b>	<b>Priority</b>	<b>Responsible Party (ies)</b>	<b>Possible Funding Sources</b>
ADD from other chapters of the plan and from existing CIP					
Public Facilities and Services/Fire Department	Fire Station renovation and expansion				
	Fire Truck				
Marine Resources-Public Facilities and Services/Harbormaster	Town Wharf upgrade				

Source: Town

## HISTORIC AND ARCHAEOLOGICAL RESOURCES

### Introduction

This chapter outlines the Town's history, identifies known prehistoric and historic resources, and recommends steps for their protection

### *State Goal*

*To preserve the State's historic and archaeological resources.*

### Summary

Key events of the history of the Town are summarized in the paragraphs that follow.

Abenaki Native Americans called the area that includes present-day Friendship Meduncook, meaning "bay at the end of the sandbar." Europeans explored the area in 1605. Part of the Waldo Patent, it was settled in 1750 when the Massachusetts Bay Colony organized the area under its jurisdiction and named it Meduncook Plantation.

A garrison was built on what became named Garrison Island in 1752, which connects to the mainland at low tide. By 1754, about 22 families lived in Meduncook with these names: Jameson, Wadsworth, Davis, Lowry, Gay, Cushing, Bartlett, Dernorse, Bickmore and Bradford. During the French and Indian War, Native Americans raided the community twice in 1758, killing several settlers and capturing others who were taken to Canada. After trying to lay siege to Thomaston in September 1758, a party of Native Americans and Acadians under the command of the French raided the village. Eight British soldiers were captured or killed.

On February 25, 1807, Meduncook Plantation was incorporated as the Town of Friendship. By 1860, when the population was 770, the village had two shipbuilders, two gristmills, one shingle mill and three sawmills. By 1880, when the population was 938, other manufactures included sails, carriages, boots and shoes. Boatbuilding remained the dominant industry, which became famous for producing the Friendship Sloop, a gaff-rigged sailboat designed for lobstering and fishing.

Friendship, located as it is, was destined to live directly and indirectly almost entirely from the sea, and its potential growth was limited by nature to that of a small, but pleasant Town. Fishing and boat building have been its major industry and mainstay. The following remarks show the great dependence the Town has had on the sea from the beginning. Two centuries before there was any settlement on these shores the Europeans had been fishing here, and the Indians gathered in the area because of the quantity of fish. At first, clams seemed to dominate along with cod, herring, and alewives. In 1848, an Article was placed on the Town Warrant to see what the Town would do to prevent inhabitants of their Town from destroying clams. Again in 1883 the Town of Friendship became concerned that the clam-flats would be depleted because 4,000 bushels of clams had been taken that year.

From 1830 to 1860, a ship full of salt dried cod was shipped every week to New York. Scallops, shrimp, and flounder were harvested. Lobsters were so plentiful that wading out at low tide and setting a trap would yield a catch when hauled in again the next low tide. Lobsters were shipped to all parts of the country. The first lobster license was issued to a Friendship man, and in 1960 Friendship was unofficially considered the second largest lobster harbor falling behind only Vinalhaven. Friendship has consistently ranked among the top three Maine towns in terms of Lobster landings over the past few decades. Friendships islands were originally inhabited to provide access to fishing areas further from shore. Later, powerboats made island residence less important. Still later, larger and faster powerboats allowed more intensive fishing and fishing further from shore. Friendship boat builders have always produced quality craft. They range in size from dories and skiffs to big sloops and schooners. Friendship schooners have traveled the world over and back. However, the boat building would have a bigger reputation if only there had been more local timber available. Around 1880, the first Friendship Sloop, a boat constructed mostly for fishing became popular, as it "was easy to sail and kept a man dry. As gasoline engines displaced sails for fishing, this sloop, because of its appealing lines, was modified for yachting use and became well known throughout the sailing world.

The Friendship Sloop Society is a nonprofit organization incorporated in the State of Maine in April of 1961. The purpose of the Society is to encourage the building and sailing of Friendship Sloops, and to provide a medium for owners and friends to meet and enjoy each other around a common interest.

The Friendship Museum, established in 1964, is a museum of local history preserving the artifacts and documents of a traditional seafaring community. The small brick schoolhouse that houses the museum is itself a museum artifact. Measuring 20 by 25 feet, it is a typical one-room schoolhouse of the mid-19th century. It served as a grammar school from 1851-1923.

Citizens interested in a detailed history of Friendship should read:

- *History of Friendship, Maine: A Gazetteer of the State of Maine*, George J. Varney, 1886.
- *Lasting Friendships: A Century of Friendship Sloops*, T. B. R. Walsh and Ralph W. Stanley, 2014.

## Timeline

**15,500 BP** (BEFORE PRESENT) A mile of ice (Laurentide Ice Sheet) to continental shelf 200+ miles offshore

**12,500 BP** All ice gone but coast covered to mid-state.

**10,500 BP** Coast line rebounding sea level rising. First Paleo-Indians arrive.

**5,500 BP** Land rebounded sea level still rising inhabited by small groups of Archaic Indians (Red Paint People so called)

**2,500 BP (500 BC)** Coastline and Islands stabilized at present level. Woodland Indians in residence.

**1000 AD** Probable Norse sightings.

**1497-1600** 1497 Cabot; 1524 Verrazano; 1525 Gomez; 1536-1543 Cartier

**1600's** European fishermen at Monhegan, Pemaquid, Darnariscove. Probably sometime between 1585 and 1605 our town was visited, explored and or exploited by some unknown but curious European entrepreneur.

**1605** Weymouth: First recorded exploration of our shores by small boat parties.

**1670's** Islands and mainland west of Pemaquid were sparsely settled by Massachusetts people.

**1696** Pemaquid falls French & Indian Wars settlements delayed and destroyed.

**1740's** Settlement resumes including Meduncook (Friendship) this time permanently. No direct evidence of local Island settlement is available.

**1743** Five Pilgrim families who had found Massachusetts too crowded and religiously uncongenial sought the spaciousness of a new settlement. They settled on part of the Meduncook Patent, which was granted to Samuel Waldo by the King of England. The Indians had named the area Meduncook (meaning Sandy Shores). Probably the Pilgrims settled here as there were existing communities already established nearby. Certainly, the abundance of fish was a contributing factor

**1750** Meduncook was formally organized Meduncook Plantation by the Massachusetts Bay Colony and came under the rule of the Massachusetts General court. By this time there were twenty families living here.

**1752** A fort was built on Garrison Island, which was deemed necessary as protection from the Indians. Twenty-two families lived within the wall. Only one man, Mr. Bradford, refused the protection of the garrison.

**1772** 40 families in Meduncook (200 people); a pre-revolution British Admiralty chart shows houses on, Carvers Island (Morse) and Meduncook Long Island (Friendship Long Island)

**1775** A letter of support and a contribution were sent to Massachusetts militia to express concern about their struggle in the American Revolution.

**1778** During the Revolution the British Blockaded food to the colonies. What little food that did get through to Meduncook was of poor quality. The settlers of Meduncook had to turn to fish and

clams, which had unfortunate digestive results. This caused a severe epidemic with heavy mortality, especially in the children.

**1790** Island Census shows Morse 9, Long Island 39, Cranberry 8, Harbor/Hall, 10 Farmers, fishermen, boat builders, 66 total households, 140 persons.

**1807** Friendship was incorporated into a Town including three islands, Carver (which is now Morse), Friendship Long Island and Crotch Island. School districts were established.

**1810** First church (a union church) built in East Friendship.

**1813** Friendship for the first time provided help for the poor. 7 were paid to board the poor. Eventually some of the Friendship poor were moved to other Towns, but were still wards of the Town. 1860 was the first year Friendship voted more for schools than they did for the poor. In 1863 it was voted not to pay board to other Towns and to bring all the paupers home.

**1814** Islands- incorporated into the Township: Cranberry, Otter, Black, Hall, and Harbor Islands including small islets and rocks adjacent to same. Friendship now contained 8,900 acres and a shorefront of 44.5 miles.

**1818** Waldoboro requested Friendship to annex South Waldoboro. The Town voted “not to do.”

**1845** The Methodist Church built.

**1860** A re-division of county lands transferred Friendship from Lincoln County A to Knox County.

**1862** The State of Maine requested volunteers from each community to serve in the United States Army. Fourteen Friendship men volunteered. At this time, Friendship voted to borrow \$2,000 at not over 6% to pay the families of the volunteers while their men were away. This is the first mention of the Town borrowing money, and it would be a long time before the debt could be paid off. A long period of drafting men for the services kept Friendship borrowing to support the draftees' families.

**1868** Advent Church built.

**1870** At this time, Friendship began to move and develop. Roads were surveyed and built, bridges were put in place, wharves appeared on the waterfront, stores kept supplies of all kinds, and many businesses began. Summer people were erecting summer cottages, and developing Martin Point and Davis Point. Two ice companies out and shipped by schooner t in the summertime as far as India. The Union Granite Company of Friendship Long Island had 125 workmen quarrying the finest granite. Granite was shipped everywhere; Grant's Tomb in New York City was built from this granite. This period had many businesses; a dressmaker, a milliner, a coffin maker who sold coffins for \$14.00, a stone cutter, carriage maker, portrait painter, grist mills, two brick yards, and many more. There were four boat builders and three hotels. Coal could be procured on one of the wharves. Friendship had three Post Offices with a fourth one

open only in the summer and for only one hour daily, and they served coffee while sorting mail. Mail came in and out of Town three times a day.

**1882** Many of the local fishermen of Friendship, Bremen and Thomaston started building gaff rigged sloops designed to meet specific needs for fishing. The fishermen would build a sloop during the winter, fish from it all summer, selling in the Fall, and start the chain over again the next winter. Wilbur Morse's Boatyard in Friendship "mass" produced the sloops (one sloop every two or three months) which became widely known as Friendship Sloops. This craft was used for seining, handling for cod, sword fishing, mackereling as well as lobstering. The advent of motors ended the Friendship Sloop's fishing career. These sloops have been found as far away as Hawaii, a wreck off Italy and another wreck off the coast of the Netherlands.

**1887** The Friendship Representative to the State Legislature proposed and got passed the first Lobster Measure Bill. The development of Martin Point and Davis Point continued. Warren and Waldoboro people bought property so as to be able to be at the shore for the summer. Most of these cottages have been passed down to succeeding generations. It was not until 1958 that Davis Point started having year-round residents. - Martin Point followed with year-round residents beginning in 1962.

**1891** Baptist Church built.

**1892** Friendship had two daily stages, one trip to Waldoboro and the other to Thomaston. A steamer made three trips a week to Rockland where people could transfer to Portland and Boston.

**1896** Board of Health appointed.

**1899** Clamming industry was booming with Burnham and Morrill running the clam factory full scale. Everyone that wanted work that year had it. Boats of all sizes were being launched, some for Friendship people and others going for delivery up and down the coast. A water system was put through the Town going as far as the wharves. Telephones came to town. A telephone line was installed from Waldoboro and another line from Thomaston. New homes were springing up everywhere, and repairs made on old ones. For the first time in many years, the Town was out of debt. Lobstering, clamming, and fishing were still active occupations.

**1910** Sharp decrease in population on the islands coincided with acceptance of internal combustion engines. No longer a need to be so near the fishing grounds.

**1940** Clamming, on a big scale, started dropping off, but lobstering was still a major source of support for Friendship. Almost no year round residents on the islands; mostly seasonal fishermen and Summer residents.

**1950's** Summer residents on the islands. Old houses restored, a few new cottages built. Generally slow development.

**1961** The Friendship Sloop Society was organized for the purpose of reviving interest in the Friendship Sloop and to promote the building of wooden boats. Nonprofit status was given with this understanding. In 1961, the first Regatta was held in Friendship with 14 of the 29 sloops participating. This annual Regatta was held in Friendship for 23 years before moving to Boothbay. In 1995, it was held in Rockland for the first time. At the present time there are 233 sloops registered in the Society, which has about 250 members. About 3,000 to 4,000 spectators arrived for the Regatta each year until 1984 and more than 200 spectator sloops followed the races. Obviously, this put a great strain on the Town of Friendship with its few accommodations. As a token of appreciation, the Sloop owners created the Pendleton Memorial Scholarship Trust Fund for Friendship students seeking an education beyond secondary schooling. At this time between \$3,000, \$4,000 is awarded annually. Other Friendship races are now held at Marblehead, MA; New London, CT; and Northeast Harbor, ME.

**1970** The Friendship water system was shut off because residents could not afford new pipes or had their own wells.

**1971** Hahn Community Center was built. A gift to Friendship by the wife of town physician in his memory.

**1972** A new Fire House was built.

**1973** Statewide mandatory shoreland zoning prompted the Town to establish a planning board and adopt shoreland zoning.

**1981** The Armstrong Memorial Library was rebuilt on the same location by the Town with the assistance of the Armstrong family and other interested citizens.

**1985** Gasoline contamination was found in 11 wells in the central part of Friendship, resulting in a great hardship for those involved. The Department of Environmental Protection (DEP) was called in for assistance in providing a public water supply. The DEP successfully had a well drilled, which provides water for up to 40 homes, the Village School, and the Public Library. Completion of this water system was in 1988, and the operation costs are jointly funded by the users of the system and income from the state funded subsidy trust fund.

**1987** Friendship Shoreline Ordinance enacted.

**1988** Town passed amendment to zone harbor areas for marine related industry. Also voted in Site Plan Review and Wellhead Protection Ordinances.

**1989** Shellfish Conservation Ordinance enacted.

**1990** Flood Plain Zoning was established.

**1991** New Shoreland Zoning Ordinance enacted.

**1994** Harbor, Town Wharf and Float Ordinance enacted.

1995 New Shellfish Conservation Ordinance enacted

*Analyses*

(1) *Are historic patterns of settlement still evident in the community?*

Yes, a number of dwellings from the nineteenth century can be found in Friendship. Civic, religious and commercial buildings from this era are present as well, especially in the village area.

(2) *What protective measures currently exist for historic and archaeological resources and are they effective?*

Both the Land Use Ordinance and Shoreland Zoning Ordinance state that in reviewing a change of use of a non-conforming structure, “the Planning Board shall require written documentation from the applicant regarding the probable effects on ... archaeological and historic resources...”

The Shoreland Zoning Ordinance states that to approve an application and issue a permit, the Planning Board/Code Enforcement Officer must make a positive finding that the proposal: “Will protect archaeological and historic resources.” Shoreland Zoning also states, “Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Commission prior to rendering a decision on the application.” Additionally, “A permit is not required for an archaeological excavation as long as the excavation is conducted by an archeologist listed on the State Historic Preservation Officer’s level 1 or 2 approved list...”

The Site Plan Review Ordinance states, “If any portion of the site has been identified as containing historic or archaeological resources, the development must include appropriate measures for protecting these resources, including but not limited to, modification of the proposed design of the site, timing of construction, and limiting the extent of excavation.”

The Subdivision Ordinance states, “If any portion of the subdivision is designated a site of historic or prehistoric importance by the comprehensive plan or the Maine Historic Preservation Commission, appropriate measures for the protection of the historic or prehistoric resources shall be included in the plan.”

The Floodplain Management Ordinance allows reconstruction of historic properties in floodplains, subject to limitations.

Taken as a whole, these ordinance provisions have been somewhat effective, predominantly for shoreland properties. Most of the Town's historic and prehistoric resources are found in shoreland areas.

- (3) *Do local site plan and/or subdivision regulations require applicants proposing development in areas that may contain historic or archaeological resources to conduct a survey for such resources?*

The Site Plan Review Ordinance requires that historic and/or archaeological resources be identified by location in the submitted plan and described. The subdivision ordinance does not require a survey but does require that appropriate measures for the protection of the historic or prehistoric resources be taken.

- (4) *Have significant historic resources fallen into disrepair, and are there ways the community can provide incentives to preserve their value as an historical resource?*

The historic structures Need to be fully inventoried and evaluated.

The community can inform owners of historic properties about the Federal Historic Preservation Tax Incentives program. This program can foster private investment to rehabilitate certified historic structures (building listed individually in the National Register of Historic Places or a building located in a registered historic district and certified by the Secretary of the Interior as contributing to the historic significance of the district). As well, owners of historic properties can be informed that a Maine State taxpayer is allowed a credit equal to the amount of the Federal credit claimed by the taxpayer under Internal Revenue Code for rehabilitation of certified historic structures located in Maine.

## *Condition and Trends*

- (1) *The community's Comprehensive Planning Historic Preservation Data Set prepared and provided to the community by the Historic Preservation Commission, and the Office, or their designees.*

See the map titled Known Archaeological Sites and Areas Sensitive for Prehistoric Archaeology in Friendship, prepared by the Maine Historic Preservation Commission. Their findings and recommendations are presented in the paragraphs that follow.

### Prehistoric Archaeological Sites

The first inhabitants of Friendship were Native Americans. Shell middens are believed to be the accumulated debris of countless meals of clams, oysters and other seafood by these people. Archaeologists have estimated the age of these middens to be between one and five thousand years. There are 42 such shell middens located on the marine shoreline of Friendship (in the shoreline zone, eroding land edge). Seventeen of these may be significant (hold research value, be eligible for listing in the national register). Coastal reconnaissance archaeological survey is complete. The Maine Historic Preservation Commission recommends that intensive level survey on National Register eligible sites, and site protection, are needed.

### Historic Archaeological Sites

To this date, eight historic archaeological sites are documented in Friendship:

- Garrison Island Fort (ME 163-001) English settlement, fortified ca.1750-1755
- Morse Island Contact (ME 163-002) European and Native American camp, pre-1492, 1492 to 1700
- "Myra J. Wooster" (ME 163-003) American wreck, vessel 1934
- Stone structure (ME 163-004) American domestic unknown date
- "Conqueror" (ME 163-005) American wreck, gas screw, 1913-1933
- "Thelma" (ME 163-006) American wreck, gas screw, 1922-1939
- "Carrie" (ME 163-007) American wreck, sailing vessel, 1867
- "Speedwell" (ME 163-008) American wreck, oil screw, 1917-1926

No professional surveys for historical archaeological sites have been conducted in Friendship. Future archaeological surveys should focus on the identification of potentially significant resources associated with the Town's agricultural, residential, and industrial heritage, particularly those associated with the earliest Euro-American settlement in the 17<sup>th</sup> and 18<sup>th</sup> centuries.

### Historic Building / Structures / Objects

There are no historic buildings/structures/objects currently listed in the National Register of Historic Places in Friendship. The Maine Historic Preservation Commission recommends that a comprehensive survey of Friendship's historic aboveground resources be conducted in order to

identify those properties that may be eligible for nomination to the National Register of Historic Places

### Cemeteries

Cemeteries are a cultural resource providing insight into the history of the community. The Town's larger cemeteries are shown on the map titled Public Facilities. More information on these cemeteries can be found in the Public Facilities and Services Chapter.

- (3) *An inventory of the location, condition, and use of any historical or archaeological resource that is of local importance.*

See the map titled Known Archaeological Sites and Areas Sensitive for Prehistoric Archaeology in Friendship and the list above of Prehistoric Archaeological Sites and Historic Archaeological Sites. Source: Town of Friendship

- (4) *A brief description of threats to local historic resource and to those of state and national significance as identified by the Maine Historic Preservation Commission.*

Prehistoric sites (shell middens) are located in shoreland areas and thus face erosion, especially from tidal action. Like all old buildings, historic structures require regular, ongoing maintenance. Since many of the Town's oldest buildings are located near the shore, they require ongoing upkeep to repair damage from heavy winds and saltwater spray.

**Policies**

*Protect to the greatest extent practicable the significant historic and archaeological resources in the community.*

**Strategies**

<b>Historic and Archeological Resources: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<i>(1) For known historic archeological sites and areas sensitive to prehistoric archeology, through local land use ordinances require subdivision or non-residential developers to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.</i>	Planning Board	Immediate and Ongoing
<i>(2) Adopt or amend land use ordinances to require the planning board (or other designated review authority) to incorporate maps and information provided by the Maine Historic Preservation Commission into their review process.</i>	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Immediate
<i>(3) Work with the local or county historical society and/or the Maine Historic Preservation Commission to assess the need for, and if necessary plan for, a comprehensive community survey of the community's historic and archaeological resources.</i>	Planning Board, Historical Society, and Maine Historic Preservation Commission	Midterm
(4) The Town should create a list of significant historic resources adding to the inventory in this chapter, and should plan for the preservation of these resources, if possible.	Planning Board and Historical Society	Immediate
(5) The Friendship Comprehensive Planning Historic Preservation Plan data set, which has been provided by the Maine Historic Preservation Commission, and is incorporated in this chapter, should be utilized for setting Town policy and action.	Planning Board and Selectmen	Immediate and Ongoing

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

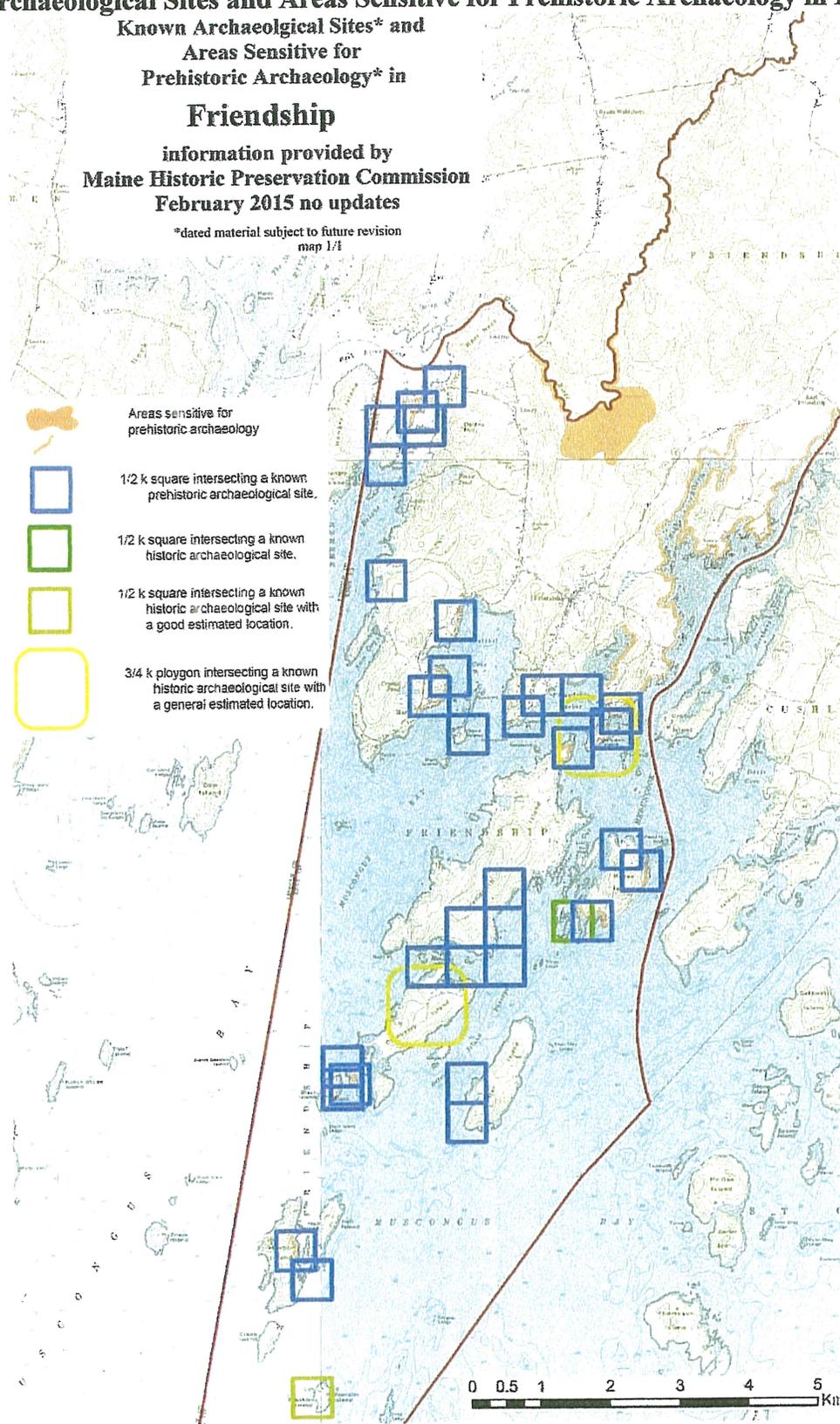
# Known Archaeological Sites and Areas Sensitive for Prehistoric Archaeology in Friendship

Known Archaeological Sites\* and  
Areas Sensitive for  
Prehistoric Archaeology\* in

## Friendship

information provided by  
Maine Historic Preservation Commission  
February 2015 no updates

\*dated material subject to future revision  
map 1/1



Source: Maine Historic Preservation Commission

## MARINE RESOURCES

### Introduction

The marine resources of Friendship contribute to the Town's local economy. A good number of working residents are employed in marine based businesses. Marine resources are also valued for habitat preservation and for recreation. The purposes of this chapter are to help the Town identify and manage its marine resources sustainably, protect the health of residents, and safeguard the local economy dependent upon these resources. The format of this chapter follows the State Comprehensive Plan Review Criteria Rule, as amended on 8/6/11. State provisions are italicized.

### *A. State Goal and State Coastal Policies*

1. *To protect the State's marine resources industry, ports and harbors from incompatible development and to promote access to the shore for commercial fishermen and the public.*
2. *For coastal communities, the Growth Management Act requires that a local comprehensive plan address the state coastal management policies (38 MRSA §1801). These are:*
  - a. *To promote the maintenance, development, and revitalization of the State's ports and harbors for fishing, transportation and recreation;*
  - b. *To manage the marine environment and its related resources to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand our understanding of the productivity of the Gulf of Maine and coastal waters and to enhance the economic value of the State's renewable marine resources;*
  - c. *To support shoreline management that gives preference to water-dependent uses over other uses, that promotes public access to the shoreline and that considers the cumulative effects of development on coastal resources;*
  - d. *To discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides or sea-level rise, it is hazardous to human health and safety;*
  - e. *To encourage and support cooperative state and municipal management of coastal resources;*
  - f. *To protect and manage critical habitat and natural areas of state and national significance and maintain the scenic beauty and character of the coast even in areas where development occurs;*
  - g. *To expand the opportunities for outdoor recreation and to encourage appropriate coastal tourist activities and development;*
  - h. *To restore and maintain the quality of our fresh, marine and estuarine waters to allow for the broadest possible diversity of public and private uses; and,*
  - i. *To restore and maintain coastal air quality to protect the health of citizens and visitors and to protect enjoyment of the natural beauty and maritime characteristics of the Maine coast.*

## B. Analyses

*(1). Is coastal water quality being monitored on a regular basis?*

The Maine Department of Marine Resources (DMR) monitors water quality regionally with shoreline surveys to detect sources of pollution. Volunteer groups monitor water quality as well.

*(2). Is there a local or regional plan in place to identify and eliminate pollution sources?*

Municipal plans to eliminate pollution include ongoing cooperation with Maine DMR to locate and mitigate or eliminate overboard discharges that affect shellfish areas.

The Muscongus Bay Study of May 2006 submitted to the State Planning Office by the Quebec-Labrador Foundation/Atlantic Center for the Environment included among other issues, the following observations and recommendations:

“Environmental and Biological Monitoring: To date no assessment of the state of Muscongus Bay has been conducted. No baseline environmental characterization exists either. The public bases its opinions about the bay’s environmental “health” largely on their own experiences and the absence of crisis. Yet there are at least thirty-five different continuous or limited monitoring efforts occurring in Muscongus Bay and its estuaries. Fourteen or more organizations are involved in these activities. The public is largely unaware of these efforts or what they reveal about the state of the bay and its resources. Many of these programs face similar challenges in terms of volunteer recruitment, public education and fundraising. Few are aware about one another’s efforts. Some kind of bay-wide coordination and networking is clearly needed if the results of these efforts are to benefit management of the bay’s environment.”

Runoff from heavy rains can cause untreated or insufficiently treated wastewater to enter coastal waters. See the responses below and the Public Facilities chapter and Capital Investment Plan in the Fiscal Capacity chapter of this plan for more information.

*(3). Has closing of clam or worm flats threatened the shellfishing industry, and are sources of contamination known? Are sources point (direct discharge) or nonpoint sources?*

See the map titled Marine Resources and Habitat for areas prone to shellfish closures. Water quality can be degraded by many factors, resulting from natural occurrences and from human activity. Pollution can be classified by its origin. Point source pollution originates from a single point, such as an outflow pipe, an overboard discharge including untreated wastes from a residence, business, or industry. Non-point source pollution, for example from stormwater runoff of fertilizer, phosphorous, motor oil and other chemicals, is also of concern. The Maine Department of Environmental Protection (DEP), Bureau of Land and Water Quality lists 14 licensed, active overboard discharges approved within Friendship. See the map titled Licensed Discharges for the location of these point sources of pollution within Friendship. There are no wastewater outfall facilities licensed in Friendship. The amount of point source pollution has

decreased with fewer licensed discharges over the past twenty years. Vegetative buffers, as required in shoreland zoning and the proper use of fertilizers and appropriate disposal of chemicals, can reduce pollution runoff. Pollution reduction measures already enacted include active enforcement of the plumbing code (subsurface wastewater disposal) and shoreland zoning rules and regulations. Such measures are beneficial to shellfishing. Friendship amended its Shellfish Conservation Ordinance most recently in March 2011.

*(4). Are traditional water-dependent uses thriving or in decline? What are the factors affecting these uses? If current trends continue, what will the waterfront look like in 10 years?*

From 2000 to 2013, total landings in Friendship of marine products have increased 53.8% in weight and 55.8% in value. See *Conditions and Trends* below for more figures. See the Habitat and Marine Resources map for aquaculture lease locations.

In 2013, Friendship residents held 345 marine resource licenses. The 2013 American Community Survey of the Census estimates that up to 99 persons in Town are employed in the sector that includes fishing. According to local estimates, about 200 people are employed in marine related businesses in Town, based upon registered fishing vessels and local license holders. State and federal regulations have often curtailed these activities. The high value of waterfront property has resulted from increased demand for residential development in shoreland areas. However, this has been tempered somewhat by the downturn in the real estate market. Commercial access to the shore has been maintained.

The Town of course cannot control the national market for marine products, State and federal regulations, or the real estate market. However, current marine related uses are protected in shoreland zoning ordinance provisions, described below. Statewide, the Maine Department of Labor forecasts that the fishing industry employment, including finfish, shellfish and other marine products, will increase by 4.4 percent between 2008 and 2018.

*(5). Is there reasonable balance between water-dependent and other uses, and between commercial and recreational uses? If there have been recent conversions of uses, have they improved or worsened the balance?*

According to the Code Enforcement Officer and Planning Board, within the past ten years few conversions of water-dependent uses (and structures) to non-water-dependent and residential (seasonal and year round) uses have occurred. These conversions have been judged to have no effect on marine based activities within the Town. The 1996 town-adopted Comprehensive Plan had as local policies:

- “1. The use of the Town’s harbors for commercial fishing should take priority over pleasure boat use.
2. Commercial activities which are not functionally dependent on a waterfront location should be prohibited from locating on piers and wharves.
3. The conversion of marine related commercial facilities within the existing commercial

fisheries zone to multi-family uses should be prohibited.”

*(6). How does local zoning treat land around working harbors?*

The shoreland zoning provisions include a Commercial Fisheries District and a Maritime Activities District to protect current working waterfront activities in the harbor area. It is generally believed that these districts and their permitted uses, prohibited uses, and dimensional requirements have served Friendship well and have helped to maintain the traditional working harbor. Expansion of the Commercial Fisheries District and/or the Maritime Activities District has been merited and enacted in select areas previously zoned Rural Residential shoreland.

*(7). Is there a local or regional harbor or bay management plan? If not, is one needed?*

Friendship adopted a Coastal Waters Management Ordinance to regulate harbor activities, harbor master duties, moorings areas and define a channel. Within the past ten years, no local or harbor management plans have been adopted by the Town. It is believed that the Town might benefit from a local or regional harbor plan that dealt with these issues: maximizing mooring use and reducing the potential for conflicts among those who use the harbor.

*(8). Are there local dredging needs? If so, how will they be addressed?*

Neither the harbor nor designated channel need to be dredged now or in the foreseeable future. They are deep enough for the vessels that use them.

*(9). Is there adequate access, including parking, for commercial fishermen and members of the public? Are there opportunities for improved access?*

Over the next ten-year planning period, it is believed that the current capacity of Town owned facilities will be adequate to meet anticipated demand of commercial fishermen. Recreational users could benefit from increased capacity, including parking which tends to be limited in the summer. Adequate parking is lacking in these areas: Bradford Point. Proposed improvements to town owned facilities include increased parking at the Town landing for island residents and fishermen. See the Capital Investment Plan in the Fiscal Capacity chapter of this plan for more information. Friendship amended its Town Wharf Ordinance in March 2011.

*(10). Are important points of visual access identified and protected?*

See the Natural Resources chapter of this comprehensive plan for a description of scenic resources, most of which are found within or are close to shoreland areas.

The Shoreland Zoning Resource Protection District includes areas in which development would adversely affect water quality, productive habitat, biological ecosystems, or scenic and natural values.

Permanently conserved lands with scenic coastal views include parcels on these islands: Friendship Long Island, Crane Island and Franklin Island.

**C. Conditions and Trends**

*Minimum data required to address state goals:*

- (1). *The community's Comprehensive Marine Resources Data Set prepared and provided to the community by the Department of Conservation, and the Office, or their designees.*

See the maps titled Marine Resources and Habitat, and Shellfish Areas by Species for Maine DMR habitat information and aquaculture locations.

The number of marine resource licenses (dealers, students, and harvesters) held by Friendship residents has increased by 35 in the past three years to total 345, while the number of commercial lobster tags registered to Friendship residents has decreased by 3,115 to total 99,310.

**Total Lobster Trap Tags fished by Friendship residents**

<b>Year</b>	<b>Number of Tags Purchased</b>
2011	102,425
2012	101,405
2013	99,310

Source: Maine DMR 2015

Maine DMR categorizes marine licenses as shown in the next table for Friendship.

**Friendship Marine Licenses**

<b>Licenses</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Comm. Fishing - Crew	7	6	10	11	16	11	16	17	18
Comm. Fishing - Single	14	11	14	14	12	25	26	22	24
Comm. Pelagic Anadramous - Crew	0	0	0	0	0	0	4	2	1
Comm. Pelagic Anadramous - Single	0	0	0	0	0	0	0	1	2
Comm. Shellfish	28	25	35	39	33	30	28	26	29
Comm. Shrimp - Crew	10	11	10	11	13	13	18	16	14
Comm. Shrimp - Single	4	3	5	4	5	6	7	9	5
Comm. Shellfish +70	0	0	0	1	0	0	2	1	2
Elver-1 Fyke Net	0	3	1	0	0	0	0	0	0
Elver-Dip Net	2	9	8	9	9	9	10	10	11
Eel Pot/Hoop Net	0	0	0	0	0	0	2	2	2
Green Crab	1	0	0	0	0	0	0	0	3
Lobster/Crab Non-Comm.	15	15	14	14	13	14	15	10	11
Lobster/Crab Class II +70	0	0	0	6	6	5	6	7	10
Lobster/Crab Apprentice	8	3	3	1	0	0	1	1	2
Lobster/Crab Class I	28	27	31	29	26	37	35	33	32
Lobster/Crab Class II	104	100	101	95	97	89	97	90	82
Lobster/Crab Class III	11	19	16	17	15	13	19	21	25
Lobster/Crab Over Age 70	6	4	4	4	4	4	3	1	1
Lobster/Crab Student	25	23	22	21	19	21	23	25	27
Lobster/Crab Under Age 18	5	6	7	7	7	3	1	2	2
Lobster Meat Permit	0	0	0	0	0	0	0	1	1
Marine Worm Digging	2	0	2	0	0	2	2	2	2
Mussel - Dragger	0	1	1	1	0	0	0	0	0
Mussel - Hand	3	2	1	2	2	2	2	1	2
Retail Seafood	1	1	1	2	4	3	4	4	5
Enhanced Retail	0	0	0	0	0	0	0	0	1
Scallop - Diver	3	1	2	2	3	1	1	0	0
Scallop - Dragger	6	5	8	6	10	7	6	6	6
Scallop with Tender	0	0	0	0	0	1	0	1	1
Scallop -Non-Comm.	7	7	9	7	1	1	0	1	1
Sea Urchin/ Scallop Tender	4	4	2	2	4	2	2	1	1
Sea Urchin - Diver	3	3	3	3	3	2	2	2	1
Sea Urchin - Dragger	1	1	1	1	1	1	1	1	1
Sea Urchin with Tender	0	0	0	0	0	1	1	2	2
Seaweed	0	0	0	1	1	0	0	0	2
Wholesale No Lobsters	2	1	2	2	1	1	2	3	1
Wholesale No Lobsters, Supp	1	1	2	2	1	1	3	4	1
Wholesale with Lobsters	8	8	8	8	8	9	9	11	9
Wholesale with Lobsters, Supp	1	1	0	1	1	3	3	5	5

Source: Maine DMR

The following decapod crustaceans, fish and mollusks are present locally. Note: Additional species are found beyond what is shown in the tables below.

<b>Partial List of Decapod Crustaceans Found in Muscongus Bay and/or Adjoining Waters</b>	
<b>Common Name</b>	<b>Species Name</b>
Acadian hermit crab	<i>Pagurus acadianus</i>
American lobster (Maine lobster)	<i>Homarus americanus</i>
Arctic eualid shrimp	<i>Eualis fabricii</i>
Asian shore crab	<i>Hemigraspus sanguineus</i>
Bristled longbeak shrimp	<i>Dichelopandalus leptocerus</i>
Common shore shrimp	<i>Palaemonetes vulgaris</i>
Common spider crab	<i>Libinia emarginata</i>
European green crab	<i>Carcinus maenas</i>
Flat-clawed hermit crab	<i>Pagurus pollicaris</i>
Friendly blade shrimp	<i>Spirontocaris lilljeborgii</i>
Greenland shrimp	<i>Lebbeus groenlandicus</i>
Hairy hermit crab	<i>Pagurus arcuatus</i>
Jonah crab	<i>Cancer borealis</i>
Lady crab	<i>Ovalipes ocellatus</i>
Lesser toad crab	<i>Hyas coarctatus</i>
Long clawed hermit crab	<i>Pagurus longicarpus</i>
Lucifer shrimp	<i>Lucifer faxoni</i>
(No common name was found for this Pandalid shrimp)	<i>Pandalus propinquus</i>
Northern shrimp	<i>Pandalus borealis</i>
Northern stone crab	<i>Lithodes maja</i>
Norwegian shrimp	<i>Pontiphilus norvegicus</i>
Parrot shrimp	<i>Spirontocaris spinus</i>
Pink glass shrimp	<i>Pasiphaea multidentata</i>
Polar lebbeid	<i>Lebbeus polaris</i>
Rock crab	<i>Cancer irroratus</i>
Sand shrimp	<i>Crangon septemspinosa</i>
Sculptured shrimp	<i>Sclerocrangon boreas</i>
Short-browed mud shrimp	<i>Callinassa atlantica</i>
Striped pink shrimp/Aesop shrimp	<i>Pandalus montagui</i>
Toad crab	<i>Hyas araneus</i>
Zebra lebbeid	<i>Lebbeus zebra</i>
Note: Non-decapod crustaceans would include: barnacles, isopods and amphipods among others.	

Partial List of Fish Species Found in Muscongus Bay and/or Adjoining Waters		
Common Name	Species Name	Harvested: Yes/No
Acadian redfish	<i>Sebastes fasciatus</i>	Y
Alewife	<i>Alosa pseudoharengus</i>	Y
Alligator fish	<i>Aspidophoroides monoptygius</i>	N
American dab	<i>Hippoglossoides platessoides</i>	Y
American eel (elver as juvenile)	<i>Anguilla rostrata</i>	Y
American shad	<i>Alosa sapidissima</i>	Y
Atlantic cod	<i>Gadus morhua</i>	Y
Atlantic halibut	<i>Hippoglossus hippoglossus</i>	Y
Atlantic herring	<i>Clupea harengus</i>	Y
Atlantic mackerel	<i>Scomber scombrus</i>	Y
Atlantic menhaden	<i>Brevoortia tyrannus</i>	Y
Atlantic salmon	<i>Salmo salar</i>	N(*5)
Atlantic silverside	<i>Menidia menidia</i>	N
Atlantic tomcod	<i>Microgadus tomcod</i>	N
Atlantic wolffish	<i>Anarhichas lupus</i>	N(*3)
Blueback herring	<i>Alosa aestivalis</i>	Y(*1)
Bluefin tuna	<i>Thunnus thynnus</i>	Y
Bluefish	<i>Pomatomus saltatrix</i>	Y
Blue shark	<i>Prionace glauca</i>	Y
Brown trout	<i>Salmo trutta</i>	Y
Butterfish	<i>Poronotus triacanthus</i>	N(*2)
Cunner	<i>Tautoglabrus adspersus</i>	Y
Cusk	<i>Brosme brosme</i>	Y
Four bearded rockling	<i>Enchelyopus cimbrius</i>	N
Four-spined stickleback	<i>Apeltes quadracus</i>	N
Great white shark	<i>Carcharodon carcharias</i>	N
Grubby	<i>Myoxocephalus aeneus</i>	N
Haddock	<i>Melanogrammus aeglefinus</i>	Y
Hagfish	<i>Myxine glutinosa</i>	Y
Little skate	<i>Raja erinacea</i>	N
Longhorn sculpin	<i>Myoxocephalus octodecemspinosus</i>	N
Lumpfish	<i>Cyclopterus lumpus</i>	N
Monkfish( aka Goosefish)	<i>Lophius americanus</i>	Y
Mummichog	<i>Fundulus heteroclitus</i>	N
Nine-spined stickleback	<i>Pungitius pungitius</i>	N
Northern pipefish	<i>Syngnathus fucus</i>	N
Ocean pout	<i>Macrozoarces americanus</i>	Y
Pollock	<i>Pollachius virens</i>	Y
Porbeagle shark	<i>Lamna nasus</i>	Y
Rainbow smelt	<i>Osmerus mordax</i>	Y
Red hake	<i>Urophycis chuss</i>	Y
Rock gunnel	<i>Pholis gunnellus</i>	N
Sand lance	<i>Ammodytes americanus</i>	N

Partial List of Fish Species Found in Muscongus Bay and/or Adjoining Waters		
Common Name	Species Name	Harvested: Yes/No
Sea lamprey	<i>Petromyzon marinus</i>	N
Sea snail (*4)	<i>Neoliparis atlanticus</i>	N
Sea raven	<i>Hemitripterus americanus</i>	N
Shortfin mako shark	<i>Isurus oxyrinchus</i>	Y
Shorthorn sculpin	<i>Myoxocephalus scorpius</i>	N
Snake blenny	<i>Lumpenus lumpretaeformis</i>	N
Spiny dogfish	<i>Squalus acanthias</i>	N
Striped bass	<i>Morone saxatilis</i>	Y
Striped sea snail (*4)	<i>Liparis liparis</i>	N
Three-spined stickleback	<i>Gasterosteus aculeatus</i>	N
Thresher shark	<i>Alopias vulpinus</i>	Y
Two-spined stickleback	<i>Gasterosteus wheatlandi</i>	N
White hake	<i>Urophycis tenuis</i>	Y
Whiting (Silver hake)	<i>Merluccius bilinearis</i>	Y
Winter flounder	<i>Pleuronectes americanus</i>	Y
Witch flounder	<i>Glyptocephalus cynoglossus</i>	Y
Wrymouth	<i>Cryptacanthodes maculatus</i>	N
Notes:		
<p>*1 Closely related and nearly identical to the alewife, the 2 species are often caught together.</p> <p>*2 Not in Maine.</p> <p>*3 The fishery for Atlantic wolfish is presently closed.</p> <p>*4 In spite of its' name, this is a fish, not a snail.</p> <p>*5 Although currently closed, a recreational fishery for Atlantic salmon traditionally existed in Maine. There is no commercial fishery for them in this state.</p> <p>Although not targeted in either the recreational or commercial fisheries of the state, several of the non-targeted species listed above are incidentally caught.</p>		

<b>Partial List of Mollusks Found in Muscongus Bay and/or Adjoining Waters</b>	
<b>Common Name</b>	<b>Species Name</b>
American Oyster	<i>Crassostrea virginica</i>
Arctic Rock Borer	<i>Hiatella arctica</i>
Arctic Wedge clam	<i>Mesodesma arctatum</i>
Ax Yoldia	<i>Yoldia thraciaeformis</i>
Baltic Macoma	<i>Macoma balthica</i>
Banded Mitrella	<i>Mitrella zonalis</i>
Blue Mussel	<i>Mytilus edulis</i>
Boreal Squid	<i>Illex illecebrosus</i>
Bushy-Backed Nudibranch	<i>Dendronotus frondosus</i>
Chalky macoma	<i>Macoma calcarea</i>
Chink Shell	<i>Lacuna vincta</i>
Chestnut Astarte	<i>Astarte castanea</i>
Club-Gilled Nudibranchs	<i>Eubranchus</i> species
Common Periwinkle	<i>Littorina littorea</i>
Common Slipper Shell	<i>Crepidula fornicata</i>
Conrad's Thracia	<i>Thracia conradi</i>
Crescent Mitrella	<i>Mitrella lunata</i>
Cup-and-Saucer Limpet	<i>Crucibulum striatum</i>
Deep-Sea Scallop	<i>Placopectens magellanicus</i>
Dog Winkle	<i>Thais lapillus</i>
European Flat Oyster	<i>Ostrea edulis</i>
File Yoldia	<i>Yoldia limatula</i>
Gem Shell	<i>Gemma gemma</i>
Glassy Lyonsia	<i>Lyonsia hyalina</i>
Gould's Pandora	<i>Pandora gouldiana</i>
Great Piddock	<i>Zirfaea crispata</i>
Greenland Cockle	<i>Serripes groenlandicus</i>
Greenland Top Shell	<i>Margarites groenlandicus</i>
Greenland Wentletrap	<i>Epitonium greenlandicum</i>
Haliaect's Dove Shell	<i>Anachis haliaecti</i>
Horse Mussel	<i>Modiolus modiolus</i>
Lea's Spoon Shell	<i>Periploma leanum</i>
Long-Finned Squid	<i>Loligo pealei</i>
Maned Nudibranch	<i>Aeolidia papillosa</i>
Naked Sea Butterfly	<i>Clione limacina</i>
Near Nut Shell	<i>Nucula proxima</i>
Northern Cardita	<i>Cyclocardia borealis</i>
Northern Moon Shell	<i>Lunatia heros</i>
Mahogany Clam/Black Clam	<i>Arctica islandica</i>
Oval Yoldia	<i>Yoldia myalis</i>
Paper Spoon Shell	<i>Periploma papyratium</i>
Quahog	<i>Mercenaria mercenaria</i>
Razor Clam	<i>Ensis directus</i>

Partial List of Mollusks Found in Muscongus Bay and/or Adjoining Waters	
Common Name	Species Name
Red-Gilled Nudibranchs	<i>Coryphella</i> species
Ridged Top Shell	<i>Margarites cinereus</i>
Rim-Backed Nudibranch	<i>Polycera dubia</i>
Salt Marsh Snail	<i>Malampus bidentatus</i>
Shipworms (*1)	<i>Teredo</i> and related species
Short Yoldia	<i>Yoldia sapotilla</i>
Smooth Periwinkle	<i>Littorina obtusata</i>
Smooth Top Shell	<i>Margarites helycinus</i>
Soft-Shell Clam	<i>Mya arenaria</i>
Solitary Glassy Bubble	<i>Haminoea solitaria</i>
Surf Clam	<i>Spisula solidissima</i>
Swamp Hydrobia	<i>Hydrobia minuta</i>
Ten Ridged Whelk	<i>Neptunea decemcostata</i>
Tortoiseshell Limpet	<i>Acmaea testudinalis</i>
Veiled Clam	<i>Solemya velum</i>
Waved Whelk	<i>Buccinum undatum</i>
Note:	
*1 In spite of their name, shipworms are bivalves.	

Total landings of lobster and other species have increased in the past decade for Friendship and are shown in the next table. Landings of soft clams have decreased. See the map titled Shellfish Areas by Species for the general locations of harvested shellfish.

**Friendship Landings in 2000, 2010 and 2013**

Year	Species	Live Pounds	Value
2000	All	3,194,243	\$9,582,888
	of which:		
2000	Lobster	2,902,004	\$9,274,342
2000	Soft clams	225,562	\$257,118
2000	Other species	66,677	\$51,428
2010	All	5,065,587	\$13,838,056
	of which:		
2010	Lobster	3,988,057	\$13,300,353
2010	Soft clams	152,850	\$164,289
2010	Other species	924,680	\$373,415
2013	All	4,913,970	\$14,930,202
	of which:		
2013	Lobster	4,515,672	\$14,415,490
2013	Soft clams	153,323	\$237,045
2013	Other species	244,975	\$277,667

Source: Maine DMR, updated 6/30/2015

Note: Some species were combined due to confidentiality provisions

The number of boats registered to Friendship residents is shown by size in the next table.

**Boat Anchorage in Friendship**

Boat Length (ft)	2014
12-19	44
20-29	20
30-39	136
40-49	39
<b>Total</b>	<b>239</b>

Source: Maine DMR

See the map titled Licensed Discharges for the location of point sources of pollution within Friendship, as listed in the next table.

DEP ID	ATS ID	Owners of Licensed Active Overboard Discharges (OBD) Type 413	Water Body	Licensed Flow (GPD)
001046	71220	Putnam	Muscongus Bay	300
001543	71187	Kazanjian	Friendship Harbor	300
001597	64885	Betterley	Delano Cove	300
002080	70974	Jones	Atlantic Ocean Hatchet Cove	540
002094	70882	Tompkins Jr	Friendship Harbor	1100
002515	67279	Jones Trustee	Friendship Harbor	300
003011	66835	Friendship Lobster Co-Op	Friendship Harbor	300
004047	71520	Turgeon	Muscongus Bay	400
005093	71439	Thoburn and Wales	Friendship Harbor	150
006075	70391	Swenson/Harriman	Muscongus Bay	504
006460	71386	Egan	Muscongus Bay	300
006626	72014	Kahn-Kapp	Muscongus Bay	300
006656	72303	Achorn	Delano Cove	360
007121	64527	Pellett	Atlantic Ocean Hatchet Cove	360

Source: Maine DEP 2014

Note: GPD (gallons per day) of effluent

(2). *A map and / or description of water-dependent uses.*

See the Current Land Use map and Shoreland Zoning map (both in the Current Land Use chapter of this plan) for the existing zoning along and near the coast including shoreland zones. Most development along the coast outside of harbor areas is residential, not water dependent. Commercial uses are primarily located adjacent to the village area and on Friendship Long Island, Little Morse Island, a portion of Bradford Point and a section of the coast accessed from Forest Lake Rd. Water dependent uses are found at and near landings, piers and wharfs (public and private), which are mostly within these areas. In recent years, individuals have improved their private Proposed improvements to town owned facilities include increased parking as a

result of increased incomes from fishing.

- (3). *A brief summary of current regulations influencing land use patterns on or near the shoreline.*

Floodplain Management: Friendship participates in the National Flood Insurance Program, and the Town has adopted Floodplain Management Ordinance provisions. Special flood hazard areas are inundated by 100-year floods, i.e., less than a one percent chance of being equaled or exceeded in a given year. Ordinance provisions limit development in flood prone areas and require that new development in these areas is suitably designed to withstand flooding.

Shoreland Zoning: Friendship has adopted shoreland zoning provisions that are intended to provide protection to shorefront areas. Districts include Resource Protection, Rural Residential, Commercial Fisheries, Maritime Activities, Specified Ponds, and Stream Protection. Moderate and High Value Wetland Habitats are identified and protected as are Wellhead Protection areas. See the Shoreland Zoning Ordinance for more information on the standards and permitted uses.

- (4). *A description of any local or regional harbor or bay management plans or planning efforts.*

As noted, within the past ten years, no local or harbor management plans have been adopted by the Town. It is believed that the Town might benefit from a local or regional harbor plan that dealt with these issues: maximizing mooring use and reducing the potential for conflicts among those who use the harbor.

Friendship has a Coastal Waters Management Ordinance, a Harbor Master and Harbor Committee. They oversee the Town's moorings, floats, docks, ramps, wharves, channels, and adjacent municipal property.

- (5). *The location of facilities (wharves, boat ramps, pump-out stations, etc.), with a brief description of any regional or local plans to improve facilities.*

See the map titled Public Facilities and Services in the Public Facilities and Services chapter of this plan for the location of harbor facilities. The primary harbor facilities include the Town Wharf also known as the Town landing.

Over the next ten-year planning period, it is believed that the current capacity of Town owned facilities will be adequate to meet anticipated demand of commercial fishermen. Recreational users could benefit from increased capacity, including parking which tends to be limited in the summer. Adequate parking is lacking in these areas: Bradford Point. Proposed improvements to town owned facilities include increased parking. See the Capital Investment Plan in the Fiscal Capacity chapter of this plan for more information.

- (6). *A description or map showing public access points to the shore. Include a brief description of their use, capacity, physical condition, and plans to improve, expand, or acquire facilities such as parking or toilets.*

See the map titled Public Facilities and Services for the locations of boat launches and parks with water access.

Over the next ten-year planning period, it is believed that current capacity will be adequate to meet anticipated demand. Proposed improvements to these facilities include increased parking.

*(7). A list of scenic resources along the shoreline, including current ownership (public or private) and any protections.*

See the Natural Resources chapter of this comprehensive plan for a description of scenic resources, most of which are found within or are close to shoreland areas. [NOTE: SPECIFIC SCENIC RESOURCES (SITES) SHOULD BE IDENTIFIED IN THE COMPREHENSIVE PLAN IN THE NATURAL RESOURCES CHAPTER OR IN THE MARINE RESOURCES CHAPTER, OR IN BOTH CHAPTERS. THE TOWN COULD USE THE NEXT TABLE.]

Site Name and Location	Feature (s) Seen from Site	Prioritized Rating/ Ranking	Current Protection Status Ownership (Easements)

Source: Town of Friendship Survey

[NOTE: *ITALICIZED TEXT IS STATE REQUIRED.* TEXT IN BLUE IS SUPPLEMENTAL, MEANT TO SUPPORT THE REQUIRED STRATEGIES.]

## Policies

- (1). To protect, maintain and, where warranted, improve marine habitat and water quality.
- (2). To foster water-dependent land uses and balance them with other complementary land uses.
- (3). To maintain and, where warranted, improve harbor management and facilities.
- (4). To protect, maintain and, where warranted, improve physical and visual public access to the community's marine resources for all appropriate uses including fishing, recreation, and tourism.

## Strategies

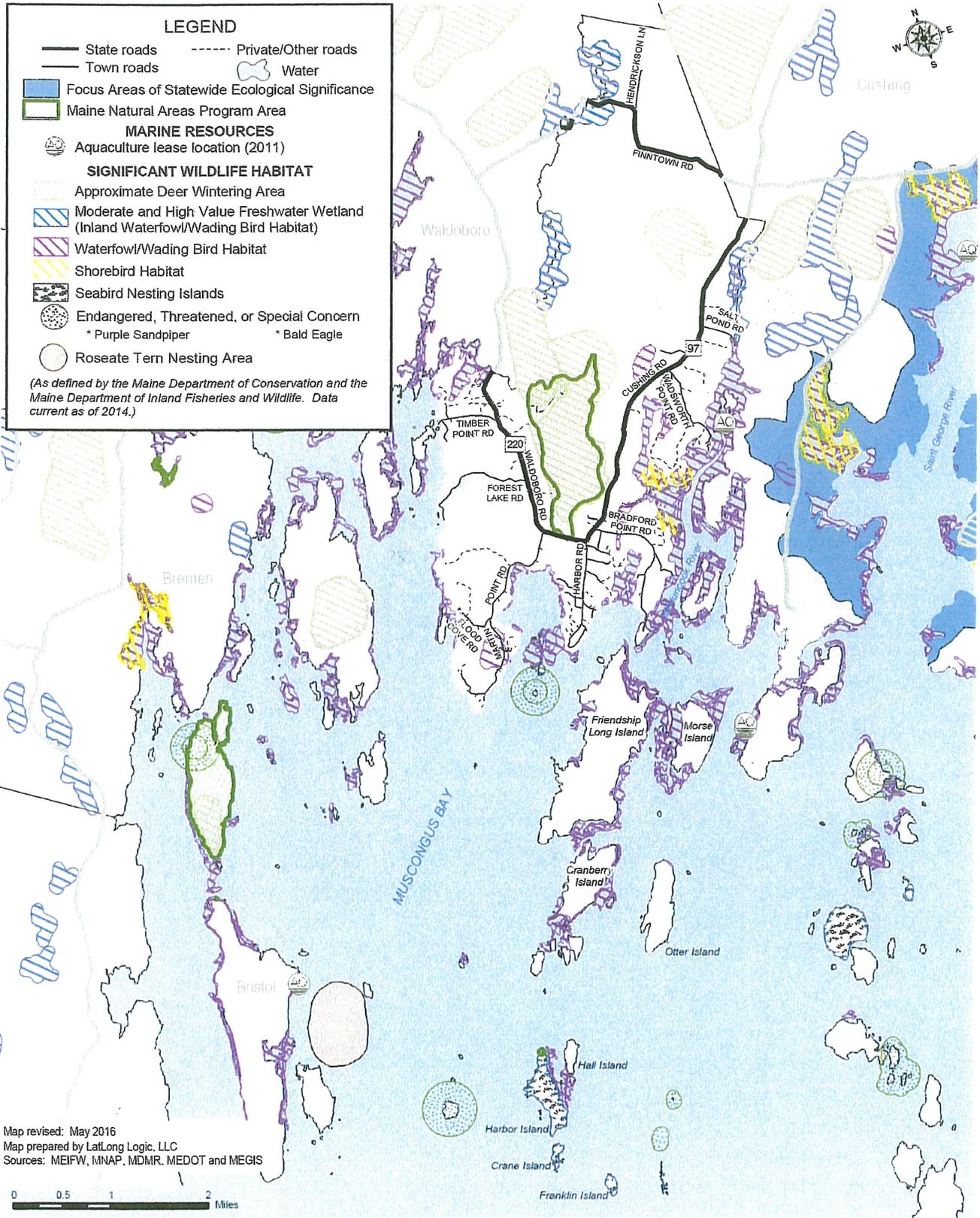
<i>Marine Resources Strategies</i>	<i>Responsible Parties</i>	<i>Timeframe</i>
(1) Identify needs for additional recreational and commercial access (which includes parking, boat launches, docking space, fish piers, and swimming access).	Selectmen, Planning Board, Harbor Committee, and Harbormaster	Immediate
(2) Encourage owners of marine businesses and industries to participate in clean marina/boatyard programs.	Selectmen, Planning Board, Harbor Committee, and Harbormaster	Immediate and Ongoing
(3) Provide information about the Working Waterfront Access Pilot Program and current use taxation program to owners of waterfront land used to provide access to or support the conduct of commercial fishing activities.	Selectmen, Town Clerk, and Harbormaster	Immediate and Ongoing
(4) Support implementation of local and regional harbor and bay management plans. <ul style="list-style-type: none"> <li>• Harbor Management Plan: Draft a harbor management plan with public input to improve the use of the harbor for commercial fishermen, residents and recreational users.</li> </ul>	Selectmen, Harbor Committee, Harbormaster, Commercial Fishermen, Maritime Businesses, and Town Meeting Vote	Immediate
(5) If applicable, provide sufficient funding for and staffing of the harbormaster and/or harbor commission.	Selectmen, Planning Board, Harbor Committee, and Harbormaster	Midterm and Ongoing
(6) Work with local property owners, land trusts, and others to protect major points of physical and visual access to coastal waters, especially along public ways and in public parks. <ul style="list-style-type: none"> <li>• Consider purchasing rights of first refusal for access points, permanent easements, or property of critical importance to marine, civic, or recreational activities.</li> </ul>	Selectmen, Planning Board, Harbor Committee, Harbormaster, Property Owners, and Land Trusts	Midterm

<i>Marine Resources Strategies</i>	<i>Responsible Parties</i>	<i>Timeframe</i>
(7) Educational Outreach: Improve public information and education related to coastal management and the use of local marine resources and the potential impacts of ocean acidification, sea level rise and other environmental concerns.	Harbor Committee, and Harbormaster	Midterm and Ongoing
(8) Mooring Plans/Floats: Relocate moorings as necessary to accomplish efficiency of harbor use, improved navigation and safety, and separation of harbor user groups. Increase float space and dinghy space as feasible to meet current needs. Note: Could be included in Harbor Management Plan.	Selectmen, Harbor Committee, and Harbormaster	Immediate and Ongoing
(9) Ordinance - Low Impact Development: Consider amending the Zoning Ordinance to incorporate Low Impact Development standards to reduce runoff and other pollution from new development or redevelopment and thereby improve coastal resilience to coastal storms, ocean acidification and other changing environmental conditions.	Selectmen, Planning Board, Ordinance Review Committee, Harbor Committee, Harbormaster, and Town Meeting Vote	Long Term and Ongoing
(10) Ordinance – Docks and Piers: Amend pier and dock regulations to minimize the potential negative impacts of a proliferation of these structures in ecologically sensitive areas, or areas where navigation might be impeded or where access below the high tide may be limited by construction of docks or piers, which would impede fishing, fowling, boat landings, skin diving and other rights of access as set in state statutes or court decisions.	Selectmen, Planning Board, Ordinance Review Committee, Harbor Committee, Harbormaster, and Town Meeting Vote	Long Term and Ongoing
(11) Ordinance - Shoreland Zoning: Periodically review the Shoreland Zoning Ordinance to suggest amendments to protect the health and vitality of marine resources.	Selectmen, Planning Board, Harbor Committee, Harbormaster, Ordinance Review Committee, and Town Meeting Vote	Long Term and Ongoing
(12) Town Landings: Continue to make appropriate improvements to public landings as needed. Where feasible, provide off-street parking improvements to satisfy existing needs at these landings. Acquire property or perpetual use rights to support landing use.	Selectmen, Harbor Committee, and Harbormaster	Midterm and Ongoing

<i>Marine Resources: Strategies</i>	<i>Responsible Parties</i>	<i>Timeframe</i>
<p>(13) Water Quality Protection:</p> <ul style="list-style-type: none"> <li>• Continue to work with the Department of Marine Resources regarding impacts on water quality resulting from existing and potential pollution sources.</li> <li>• Identify and mitigate existing pollution resulting from subsurface septic disposal, overboard septic discharge into coastal waters and vessel septage discharge into harbor waters to improve shellfish habitats.</li> <li>• Meet with and encourage property owners with overboard discharges to replace these point sources of pollution with advanced engineered subsurface waste systems to reduce pollution and related shellfish closures. Seek resources from state agencies, non-profits and local donations to cover a portion of the costs for these new systems to assist property owners.</li> <li>• Establish a revolving loan fund to assist low income residents to replace failing septic systems.</li> <li>• Request that Maine DMR more regularly test coastal waters on a timely basis after storms and heavy rains to reduce shellfish closure times so that the closures more accurately reflect the time necessary for safety before shellfishing areas can be reopened.</li> </ul>	<p>Selectmen, Maine DMR, Maine DEP, Property Owners, Harbor Committee, and Harbormaster</p>	<p>Immediate and Ongoing</p>

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# MARINE RESOURCES AND HABITAT



Source: Maine GIS, IF&W, and DMR, 2016

# SHELLFISH AREAS BY SPECIES

**LEGEND**

<p>— State roads</p> <p>— Town roads</p>	<p>- - - Private/Other roads</p> <p> Water</p>
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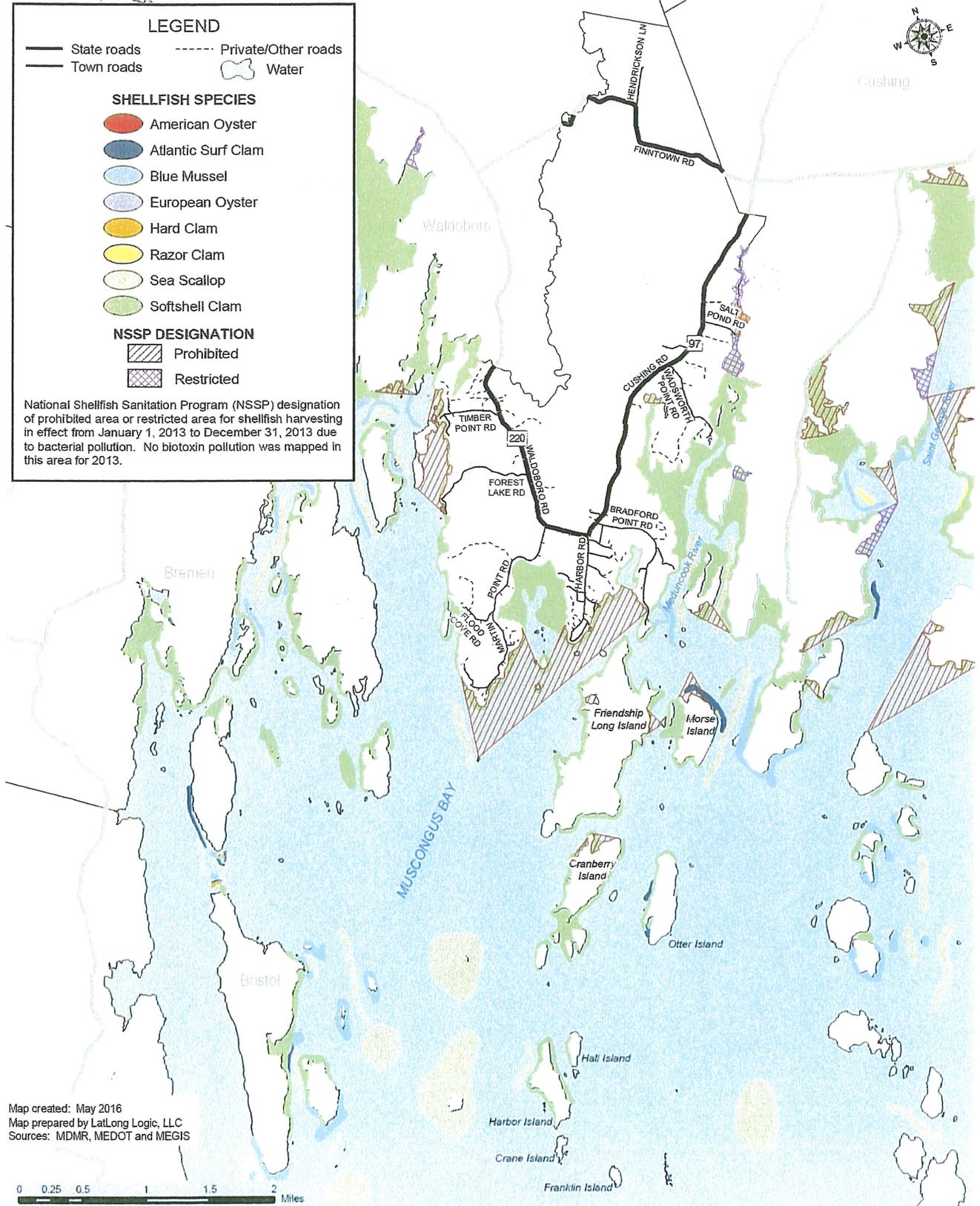
**SHELLFISH SPECIES**

- American Oyster
- Atlantic Surf Clam
- Blue Mussel
- European Oyster
- Hard Clam
- Razor Clam
- Sea Scallop
- Softshell Clam

**NSSP DESIGNATION**

- Prohibited
- Restricted

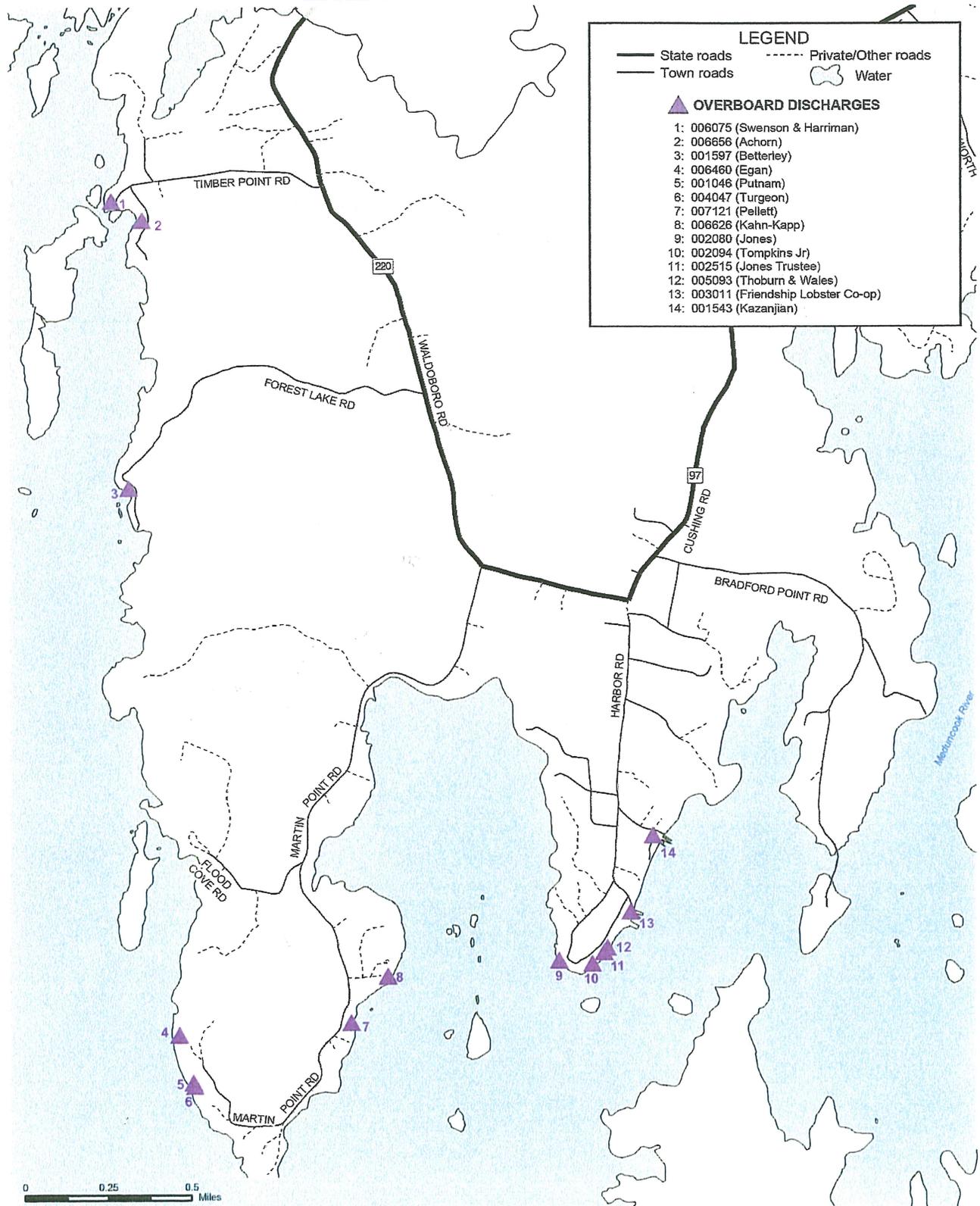
National Shellfish Sanitation Program (NSSP) designation of prohibited area or restricted area for shellfish harvesting in effect from January 1, 2013 to December 31, 2013 due to bacterial pollution. No biotoxin pollution was mapped in this area for 2013.



Map created: May 2016  
 Map prepared by LaLong Logic, LLC  
 Sources: MDMR, MEDOT and MEGIS

Source: Maine DMR, 2016

# LICENSED DISCHARGES MAP



Source: Maine DEP, 2014

## PUBLIC FACILITIES AND SERVICES

### Introduction

This chapter identifies and analyzes the public facilities and public services of Friendship. Recommendations are made to improve the performance of these town facilities and services. A list of future needs and estimated expenditures is contained in the Capital Investment Plan.

### *State Goal*

*To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.*

### *Analyses*

(1) *Are municipal services adequate to meeting changes in population and demographics?*

In general, Friendship has the capacity to provide basic and necessary municipal services to its citizens over the ten-year planning period. However, the Town should anticipate an increased demand for services for its growing elderly population, which could include a need for assisted living facilities. At this time, most of this type of housing is located nearby in Rockland, Thomaston, and Waldoboro. Due to development constraints in Friendship such as a lack of sewers to handle larger-scale multi-unit housing, this limitation on housing will most likely continue in the foreseeable future. See the Housing Chapter for more information.

(2) *Has the community partnered with neighboring communities to share services, reduce costs and/or improve services? In what ways?*

The following is a list of inter-municipal and regional efforts in which Friendship participates:

- Countywide bidding for sand and salt that is used for winter road maintenance.
- Emergency dispatch through the Knox County Regional Communications Center.
- Fire and rescue participation in countywide mutual aid program, as well as ambulance/Emergency Medical Services (EMS) contracted with the Waldoboro EMS.
- Midcoast Maine Community Action for social services for low income and at risk individuals and families.
- Mid-Coast Regional Planning Commission for land use and transportation planning assistance.
- Penquis CAP for social services for low income persons.
- Public education is provided through RSU 40, encompassing Friendship, Union, Waldoboro, Warren, and Washington.
- Regional emergency and disaster planning through the Knox County Emergency Management Agency.

- Waldoboro Transfer Station (WTS) through a municipal services agreement for solid waste disposal.

(3) *If the community has a public sewer system, what issues or concerns are there currently and/or anticipated in the future? Is the sanitary district extension policy consistent with the Future Land Use Plan as required by (38 M.R.S.A. §1163), or will it be?*

The Town does not have a public sewer system.

(4) *If the community has a public water system are any public water supply expansions anticipated? If so, have suitable sources been identified and protected? Is the water district extension policy consistent with the Future Land Use Plan?*

No public water expansions are anticipated. The existing water systems serve village residents and business. The water district has no formal extension policy.

(5) *If the town does not have a public sewer or water system, is this preventing the community from accommodating current and projected growth?*

The lack of a public sewer system has and will continue to inhibit large-scale or higher density growth town-wide. However, demand for this type of development has not been expressed. Projected growth is modest based upon observed trends and assumes that sewer will remain unavailable for Town during the ten-year planning period of this plan. The Town can accommodate the growth anticipated, predominantly residential in the form of mostly single-family detached housing units. If multi-unit development were sought, sewer or a community wastewater system would likely be needed, especially if such growth were to occur within shoreland areas.

(6) *Are existing stormwater management facilities adequately maintained? What improvements are needed? How might future development affect the existing system?*

The drainage system in Friendship is a mix of public infrastructure installed over the years, and private stormwater management systems installed as part of subdivision and site plan regulated development. Ongoing maintenance of ditches, culverts and catch basins are crucial for these systems to continue to function properly. The areas where needed improvements might be required generally fall along the state maintained roads. Any future private land development should include an analysis of potential drainage changes and the impact on neighboring properties.

Without adequate stormwater management, the cumulative effect of small, piecemeal development (new buildings and impervious surfaces like parking lots), in addition to mid- and large-scale development, would threaten adjacent properties and roadways with increased flooding. Accordingly, the review of projects through the Friendship Land Use Ordinance, Subdivision Ordinance, and the Shoreland Zoning Ordinance includes drainage standards.

Improvements to public stormwater facilities that are needed because of development projects should have a share of the cost for those improvements borne by the applicant. As well, State regulations for applicable projects address stormwater management.

(7) *How do residents dispose of septic tank waste? Are there issues or concerns regarding septic tank waste?*

Property owners are responsible for the maintenance and disposal of their septic waste. The Town contracts with a private firm for municipal facilities using septic systems. The Town is aware of a few failing septic systems including an area around the intersection of Salt Pond Rd and Cushing Rd (Route 97). The Town has sought Maine DEP funding and may seek to augment that with USDA Rural Development funds to assist the property owners to cleanup and replace their septic systems. When individual systems fail, the Town has worked with property owners to address these issues while meeting all codes and ordinances. Septage is not disposed of within Friendship. It is not anticipated that any sludge site would be developed.

(8) *Is school construction or expansion anticipated during the planning period? Are there opportunities to promote new residential development around existing and proposed schools?*

There is one school currently operating in Friendship. Friendship students also attend schools in surrounding communities. Given the decline in enrollments seen over the past decade, the decline in young families and with increases in the elderly population predominately, new school construction or expansion during the planning period is unlikely to be warranted for Friendship's share of the RSU 40s total enrollment or for the school district as a whole.

Funding cuts, which have occurred chiefly at the State level, will limit the amount of school improvements to be made over the planning period and might result in the closing of underutilized facilities. Regionalization of education has been promoted by the State in an attempt to reduce education costs, especially administrative costs. The decisions on education spending will increasingly be made on a regional basis, not by any one municipality alone.

(9) *Is the community's emergency response system adequate? Are improvements needed?*

Friendship contracts with Waldoboro Emergency Medical Services (EMS/ambulance), which are staffed with professionals. Friendship's Fire Department meets the needs of the community currently and is anticipated to do so for the ten-year planning period. Knox County town fire departments support each other when needed through mutual aid agreements.

At the Town level, the Fire Department is comprised of approximately --- volunteers who hold jobs in other occupations. Maintaining adequate staffing levels is an ongoing concern. There are efforts to attract additional volunteers. Needed facility improvements to existing buildings during the ten-year planning period are anticipated to include an expansion of the fire station. See the Capital Investment Plan for cost estimates. New or replacement vehicles (fire trucks and

ambulances) are planned for during this same period. Fire Trucks are the most significant expenditure. They should be replaced or rehabbed on a regular basis; ideally with funding from a reserve account.

The Town contracts with the Knox County Sheriff's office for police protection. This service is to be adequate currently and for the planning period.

(10) *Is the solid waste management system meeting current needs? Is the community reducing the reliance on waste disposal and increasing recycling opportunities? Are improvements needed to meet future demand?*

Since 1989, the town has contracted with the Waldoboro Transfer Station (WTS) through a municipal services agreement for solid waste disposal. The agreement also includes Cushing. The WTS accepts recyclables and waste for disposal at the PERC facility in Orrington. There is a fee schedule for the disposal of certain items like appliances, construction debris, mattresses, and TVs. If residents recycle, there is --- no additional fee for regular household waste disposal; it is covered through taxes. Recycling has reduced the volume of waste in Friendship in 2014. Private haulers offer curbside pickup on a weekly basis. It is anticipated that the current arrangement will be able to handle projected growth during the ten-year planning period.

(11) *Are improvements needed in the telecommunications and energy infrastructure?*

All businesses require basic public services. In the current economy, access to markets far beyond Friendship is essential for many as well. Internet and telecommunications infrastructure in Friendship is sufficient in many parts of the community but could be improved (as technology advances) and expanded to fill the current gaps in coverage. See the Economy Chapter for more information.

(12) *Are local and regional health care facilities and public health and social service programs adequate to meet the needs of the community?*

Health care is provided at a regional level through Miles Memorial Hospital (Damariscotta) and Pen Bay Medical Center (Rockport). Physician offices are located in Damariscotta, Rockland and Rockport. See the conditions and trends section below for more information. Locally, Waldoboro EMS provides emergency response. The current arrangement works well.

(13) *Will other public facilities, such as town offices, libraries, and cemeteries accommodate projected growth?*

The Town's public facilities, including the town office and community center, and the fire station, generally have adequate capacity for the next ten-year period, with the exception of the fire station. Major capital needs identified include the possibility of expanding and renovating the fire station, and the Hahn Center. See the Capital Investment Plan in the Fiscal Capacity Chapter for a list of proposed projects.

(14) *To what extent are investments in facility improvements directed to growth areas?*

Most public facilities are located within the village area, which is a designated growth area, so funding for their improvement will benefit the growth area.

(15) *Does the community have a street tree program?*

The Town does not have a formal street tree program.

**Conditions and Trends**

*Minimum data required to address Analyses includes the identification of the following as applicable for the public facilities and services in 3.11 C (5) (a through i):*

(1) *location of facilities and service areas (mapped as appropriate);*

See the map titled Public Facilities.

(2) *general physical condition of facilities and equipment;*

(3) *capacity and anticipated demand during the planning period;*

(4) *identification of who owns/manages the systems;*

For (2) through (4) see the responses below.

(5) *estimated costs of needed capital improvements to public facilities; and*

See the Capital Investment Plan.

(6) *the following information related to each of these public facilities and services:*

a. *Sewerage and/or Water Supply – Identify number and types of users, and percent of households served*

Friendship has no public sewer. Residents and businesses depend upon subsurface waste systems. As of 2014, the Maine Department of Health and Human Services indicated that there is one public water systems (PWS) in Friendship as shown in the next table. It serves approximately 85 users. With the exception of this system, all other residents and businesses depend upon private wells for drinking water.

<b>Friendship Public Water Systems</b>		
Name	ID - Type	Source – well groundwater
Friendship Water Department	ME0092040 - Community	200' bedrock well - primary
		414' bedrock well - back-up

Source: Maine Department of Health and Human Services

- b. *Septage – Identify any community policies or regulations regarding septage collection and disposal.*

The Town follows State regulations regarding septage collection and disposal from municipal facilities. The Town enforces the State Plumbing Code regarding subsurface waste systems.

- c. *Solid Waste – Describe the community's solid waste management system. Identify types and amounts of municipal solid waste and recycled materials for the past five (5) years.*

Since 1989, the town has contracted with the Waldoboro Transfer Station (WTS) through a municipal services agreement for solid waste disposal. The agreement also includes Cushing. Each household is responsible to pre-sort their recyclables and separate them from other waste. Recycling plastics #1 through #7, along with the goal of composting all of Friendship's household food and garden waste, should remove so much material from the waste that is currently sent to the PERC facility, so that the town may finally achieve the goal of recycling 50% of Friendship's waste.

Municipal Solid Waste expenses in Friendship have been increasing as they have statewide. The State did not provide five years of data as part of the community dataset prepared in 2015, nor did the Waldoboro Transfer Station when requested.

The Site Plan Review Ordinance has provisions for waste disposal in new commercial, industrial, office, institutional, municipal and multifamily residential developments. The Subdivision Ordinance has solid waste provisions for new developments in subdivisions.

- d. *Stormwater Management – Identify combined sewer overflows. For Municipal Separate Stormwater System (MS4) communities, describe plan and status of the major goals of the MS4 requirements.*

Friendship has no combined sewer overflows. The Town is not an MS4 community.

- e. *Power and Communications – Availability of 3-phase power, Internet (including broadband), and cable within the community.*

Three-phase power is not available. Broadband and cable television service is available to most properties abutting State and State aid roads, however, notable gaps are found in several areas.

- f. *Emergency Response System –Average call response times for fire, police, and emergency/rescue.*

The Friendship Fire Department in 2014 responded to 61 calls. In 2015, the department responded to 31 calls. No average response time was provided. The Town merged its EMS services with the Town of Waldoboro in 2007. An ambulance is housed at the Friendship fire station with two EMT responders located in town. In 2014, EMS responded to 89 calls in Friendship with an average response time of 14.5 minutes, day and night (including responses from Waldoboro and Friendship EMS crews). If the Friendship EMS crew responds, it is 14 minutes at night and 8.5 minutes in the daytime hours. The reason the night is only 30 seconds difference is because the Waldoboro EMS Station is staffed 24/7. The Friendship crew responds from home to the Friendship Station to get the ambulance and then responds to the scene.

The Town contracts with the Knox County Sheriff's Office for police protection. There were 765 calls/incidents recorded for Friendship in 2015. The nature of incidents was varied, with the top categories being property checks, vehicle related (traffic detail, traffic offense, traffic stop, erratic vehicle, radar detail, vehicle run off road, and hit and run), well-being checks, and bail check/bail violations. Average response times were not provided.

- g. *Education – Identify school administrative unit. Include primary/secondary school system enrollment for the most recent year information is available and for the ten (10) years after the anticipated adoption of plan.*

The Town is a member community of Regional School Unit (RSU) 40. Other member communities are Union, Waldoboro, Warren, and Washington. The voters of Friendship elect school board members to represent them on the School Board.

The next two tables show school enrollments of Friendship residents in area schools in 2006/2007 and in 2014/2015.

Friendship Resident Enrollment by Grade in School Year 2006/2007														
School	K	1	2	3	4	5	6	7	8	9	10	11	12	Friendship Students
A.D. Gray Middle School								10	11					21
Friendship Village School	11	11	8	15	12	9	13							79
Medomak Valley High School										17	18	17	12	64
Miller School	1	1	2	1										5
Union Elem & Gaul Middle Schools		1					1	1						3
Thomaston Grammar School								1						1
Pen Bay Christian School			1						1					2
Total Friendship Enrollment	12	13	11	16	12	9	14	12	12	17	18	17	12	175

Source: Maine Department of Education  
Note: No 4YO or EK enrollment.

Friendship Resident Enrollment by Grade and School Name in School Year 2014/2015																
School	4YO	EK	K	1	2	3	4	5	6	7	8	9	10	11	12	Friendship Students
Friendship Village School			6	8	12	8	10	8	9							61
Medomak Middle School										19	11					30
Medomak Valley High School												16	10	12	3	41
Miller School	2			1	2				1							6
Warren Community School	1			1		1		2								5
Total Friendship Enrollment	3	0	6	10	14	9	10	10	10	19	11	16	10	12	3	143

Source: Maine Department of Education

Enrollment projections for the next ten years for Friendship resident students are not available from RSU 40. Trends from the past decade suggest continued declining enrollments. However, given the relatively small size of total enrollment, fluctuations of total enrollment based upon the economy and housing market are probable. Regionally, current facilities have capacity for growth but shifts in school use by grade may be required. The municipal membership of RSU 40 may change over the next decade as communities decide whether to remain or form new districts to meet the needs of their residents.

- h. Health Care - Describe major health care facilities (hospitals, clinics) and other providers serving the community. Identify public health and social services supported by the community through municipal subsidy.*

As noted, for Emergency Medical Services (EMS/ambulance), the Town merged funded services with Waldoboro. As of 2014, Friendship participates in the Community Paramedicine program along with CLC Ambulance of Damariscotta and Boothbay Regional Ambulance Service, under the Lincoln County Health Care program. The program consists of in-home visits by a Community Paramedicine trained EMS provider. Once the doctor assigns a patient to the program, this service can monitor vital signs, weight, medicines, nutritional issues, complete blood draws and home safety assessments. The purpose of this program is to make it easier for people to stay home and cut down on emergency department visits.

The Friendship Ambulance Auxiliary Foundation (FAAF) financially sponsors, through private donations, the town's Health Clinic run by a physician, the Friendship Health officer and other Friendship residents as volunteers. They operate a Medical Mobile Health system for residents of Friendship. This system is designed to give people who live alone access to emergency medical help. In 2014, twenty residents participated in this program. The FAAF has maintained five automated external defibrillators, which are placed around the town, and has paid for ambulance transports by the Waldoboro/Friendship ambulance for residents who could not afford to pay for them.

Miles Memorial Hospital (Damariscotta), a subsidiary of Lincoln County Healthcare and Pen Bay Medical Center (Rockport), a member of MaineHealth, provide a full range of medical services and offer affiliated home health and hospice services, public health nursing, physician offices and educational programs.

- i. Municipal Government Facilities and Services -- Describe facilities and staffing for municipal administrative, enforcement, and public works operations.*

Friendship is governed by the Town Meeting/Selectmen form of government. There is no Town Charter. The Town employs a Town Clerk, Treasurer and Tax Collector

fulltime. An Assessor's Agent, Code Enforcement Officer/Plumbing Inspector, Road Commissioner, are employed part-time. The Town Office is open five days a week.

Elected officials include:

1. Selectmen (3 members)
2. Board of Assessment Review
3. Board of Assessors (3 members)
4. Fire Chief
5. Moderator for Town Meetings
6. School Board Members

The Selectmen appoint officials including:

1. Town Clerk/State Agent (Pursuant to state law the office of the Town Clerk is responsible for maintaining the official records of the Town: the supervision of state and municipal elections; the recording of vital statistics (birth, death, and marriage); and the issuing of all permits and licenses as required by state law.
2. Administrative Agent
3. Animal Control Officer
4. Board of Appeals
5. Budget Committee
6. Code Enforcement Officer/Licensed Plumbing Inspector
7. Conservation Commission
8. Constable
9. Director of Emergency Management
10. Election Clerks
11. Hahn Community Center Committee
12. Harbor Committee
13. Harbormaster
14. Health Officer
15. Highway Committee
16. Library Trustees
17. Planning Board
18. Recreation Committee
19. Road Commissioner
20. Shellfish Conservation Committee
21. Shellfish Warden
22. Tax Collector/Registrar of Voters
23. Transfer Station Committee/ Recycling
24. Treasurer
25. Water Department Board

Town volunteer committees advise and assist the Town boards and municipal staff to provide municipal services. These committees allow residents a meaningful opportunity to have a say in what types of services the Town offers now and should offer in the future.

### Municipal Buildings and Land

Town-owned facilities are listed with their size, location, condition, and capacity/anticipated needs shown in the next table.

Town-owned Facility	Size	Location	General Condition	Sufficient Capacity	Anticipated Needs
Friendship Town Office	2400 square-foot building on .612 acres	6 Harbor Rd			
Friendship Village School	11,393 square-foot building on 2.4 acres	23 School St			
Friendship Fire Department and Telecommunications Tower	.15 acres	Main St			Replace or expand fire station
Hahn Community Center	.78 acres	Main St			
Town Landings:			See the Marine Resources Chapter		
A. Wadsworth Point Landing	.16 acres				
B. Bradford Point Landing	.033				
C. Tamarack Landing	No landing				
D. Friendship Harbor Town Wharf	varies				
E. Hatchet Cove Landing	.33				
F. Forest Lake Landing	.122				
G. Timber Point Landing	.035				
H. Martin Point West Landing	.058				
I. Walker's Beach Landing	.03				

See the map titled Public Facilities for the locations of town-owned and non-municipal community facilities that are open to the public.

**Policies**

- (1) *To efficiently meet identified public facility and service needs.*
- (2) *To provide public facilities and services in a manner that promotes and supports growth and development in identified growth areas.*

**Strategies**

<b>Public Facilities and Services: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(1) <i>Identify any capital improvements needed to maintain or upgrade public services to accommodate the community's anticipated growth and changing demographics.</i>	See the Capital Investment Plan for specific strategies, responsibilities, and timeframes.	
(2) <i>Locate new public facilities comprising at least 75% of new municipal growth-related capital investments in designated growth areas.</i>		
(3) <i>Encourage local sewer and water districts to coordinate planned service extensions with the Future Land Use Plan.</i>		
(4) <i>If public water supply expansion is anticipated, identify and protect suitable sources.</i>	None anticipated.	
(5) <i>Explore options for regional delivery of local services.</i>	Selectmen, Town Voters, Long term See also the Regional Coordination Plan.	

# Public Facilities

**LEGEND**

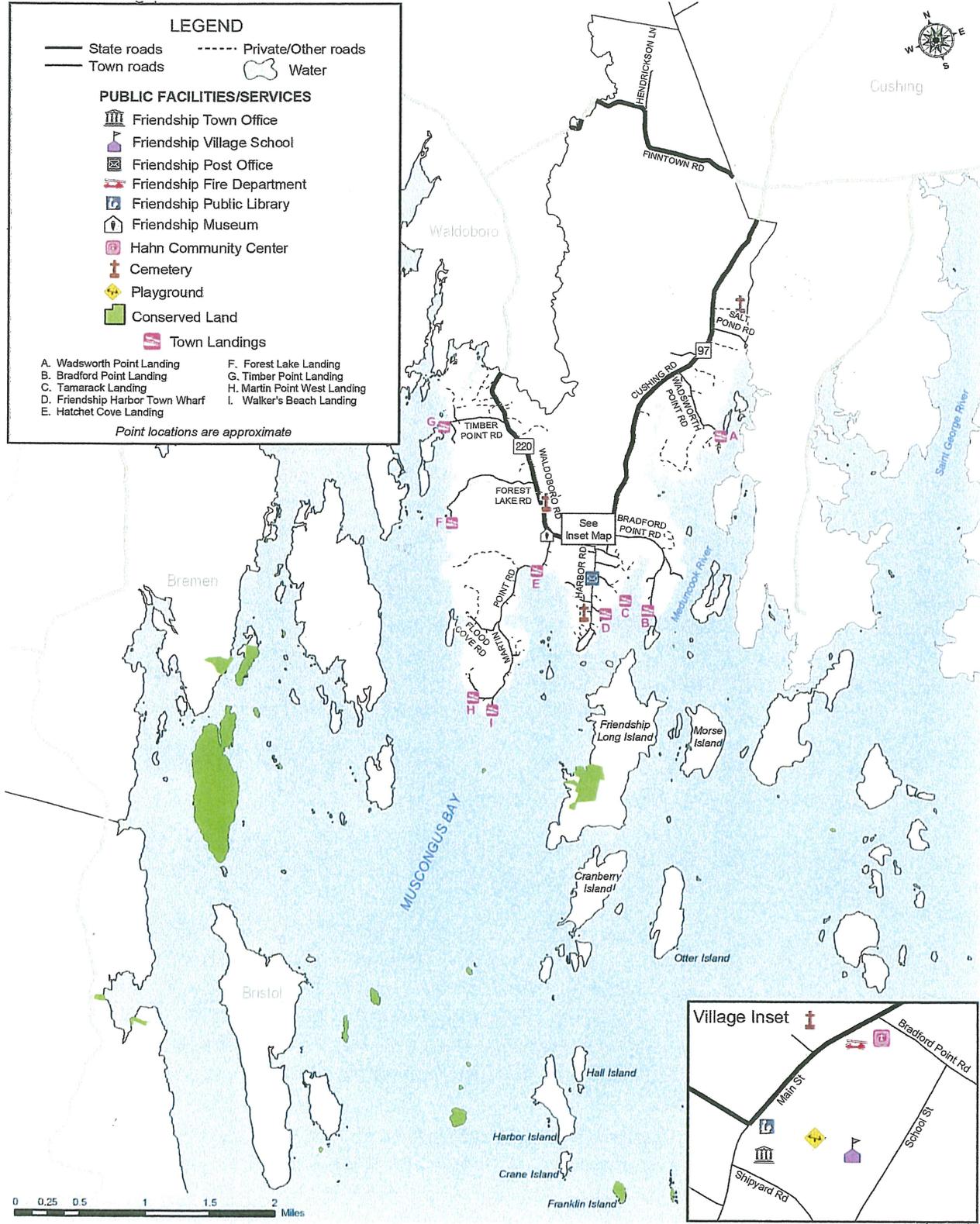
— State roads      - - - - Private/Other roads  
 — Town roads      Water

**PUBLIC FACILITIES/SERVICES**

- Friendship Town Office
- Friendship Village School
- Friendship Post Office
- Friendship Fire Department
- Friendship Public Library
- Friendship Museum
- Hahn Community Center
- Cemetery
- Playground
- Conserved Land
- Town Landings

A. Wadsworth Point Landing      F. Forest Lake Landing  
 B. Bradford Point Landing      G. Timber Point Landing  
 C. Tamarack Landing              H. Martin Point West Landing  
 D. Friendship Harbor Town Wharf      I. Walker's Beach Landing  
 E. Hatchet Cove Landing

*Point locations are approximate*



Sources: Maine GIS and Town of Friendship

## NATURAL RESOURCES

### Introduction

Natural resources define much of the physical character of Friendship. These resources are also described in the Agricultural and Forestry Resources Chapter, the Marine Resources Chapter, and the Water Resources Chapter.

### Goal

*To protect the State's other critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas.*

### Analyses

- (1) Are any of the community's critical natural resources threatened by development, overuse, or other activities?*

Most of the identified critical natural resources in Friendship are in the shoreland zone and accordingly are protected by shoreland zoning provisions. Residential development has been relatively modest and small-scale, allowing for the continued protection of larger habitats. Commercial development has been limited and focused along Route 97 and Route 220 outside of most critical resource areas. Other activities that have threatened habitats in recent years in Friendship include timber harvesting.

- (2) Are local shoreland zone standards consistent with state guidelines and with the standards placed on adjacent shorelands in neighboring communities?*

The Town's shoreland zoning standards are consistent with state guidelines and with the standards placed on adjacent shorelands in neighboring communities.

- (3) What regulatory and non-regulatory measures has the community taken or can the community take to protect critical natural resources and important natural resources?*

By updating its ordinances and through the recommendations in this Comprehensive Plan, the Town is attempting to protect natural resources. Shoreland zone ensures a good measure of protection of waterbodies and wetlands. Much of the Town's critical natural resources are found in the shoreland zone. See the Water Resources Chapter and Land Use Chapter for more information on municipal ordinances including the Land Use Ordinance and Shoreland Zoning Ordinance, and state regulations that help to protect natural resources.

Non-regulatory measures include working with property owners and land trusts to promote the voluntary use of conservation easements in areas with critical natural resources. The use of conservation easements or purchases may be more acceptable to residents and voters than increased regulations. Easements and conservation purchases result in permanent protection while municipal ordinances are subject to future amendments or repeal. Protection for critical

natural resources could be improved by incorporating the Beginning with Habitat map information included in this chapter into the land use ordinances and the permitting process. Conservation easements currently held by the Medomak Valley Land Trust in Friendship include the following properties:

- Cranberry Island, 55 acres, 1997
- Crotch Island, 61 acres, 2004
- Delano Cove, 31 acres, 2004
- Lane, 12 acres, 2007
- Shannon, 40 acres, 2007
- Martin Point Wildlife Reserve, 50 acres, 2013

The Mid-Coast Audubon Society, an affiliate of the Maine Audubon Society, owns the 95-acre Nelson Nature Preserve on Route 97, about one mile from Friendship Village. This preserve has trails and diverse habitat, from upland mixed forest to unique red maple swamp fronting the Goose River. Proximity to the coast makes this an excellent spring birding location for warblers and year-round for dense forest-dwellers such as thrush family and woodpeckers.

*(4) Is there current regional cooperation or planning underway to protect shared critical natural resources? Are there opportunities to partner with local or regional groups?*

The Town is working with the Medomak Valley Land Trust and with Maine Coast Heritage Trust to protect natural resources such as Ned's Point on Friendship Long Island. The Town has also worked with Mid-Coast Audubon regarding conservation efforts and easements in other parts of the community as well.

### **Conditions and Trends**

*(1) The community's Comprehensive Planning Natural Resources Data Set prepared and provided to the community by the Department of Inland Fisheries and Wildlife, Department of Environmental Protection and the Office, or their designees.*

The data set has been incorporated into this chapter and in the maps titled Summary Natural Constraints, High Value Plant and Animal Habitats, USFWS Priority Trust Species Habitats, Wetlands Characterization, and Undeveloped Habitat Blocks. For the Water Resources see the Water Resources Chapter.

Identified Rare and Exemplary Natural Communities and Ecosystems consist of a Maine Natural Areas Program Area (consisting of moderate and high value freshwater forested/shrub wetlands) between Route 220 and Route 97 (Red Maple Swamp). Smaller wetlands (freshwater emergent, freshwater forested/shrub) are found throughout the Town. Much of the inland areas of Town between Route 220, Route 97 and Finntown Road are an un-fragmented habitat block that benefits multiple species. Coastal areas have estuarine and marine wetlands. See the Marine Resources Chapter for more information.

Significant Wildlife Habitats, as defined by the State, are present in Friendship consisting of approximate deer wintering areas and inland waterfowl and wading bird areas, which are found along much of the coast. Shorebird habitat is found around Back River. Several islands in Friendship have identified seabird nesting sites. Areas of special concern (Rare, Threatened, and Endangered Animals) include purple sandpiper, mountain sandwort and bald eagles habitats. For habitat locations, see the map titled Summary Natural Constraints, Wetlands and Habitats and the map titled High Value Plant and Animal Habitats.

Neighboring Bristol has a Roseate Tern nesting area. Neighboring Cushing has a focus area of Statewide Ecological Significance: Lower St. George River. This state-defined area does not directly border Friendship. The numerous coves and mudflats found here are influenced by freshwater discharged from the river, high-speed currents and tidal fluctuations and provide habitat for wading birds and waterfowl and migrating shorebirds as well as commercially significant resources including diadromous fish, marine worms and, most notably, shellfish. See the Marine Resources Chapter for more information. See the Water Resources Chapter for Fish Species of Greatest Conservation Need.

#### **State Definition of Critical Natural Resources (105 Chapter 208 CP Review Criteria Rule)**

*“Critical natural resources” means the following natural resources which under federal and/or state law warrant protection from the negative impacts of development:*

1. *Resource Protection District areas as set forth in MDEP Guidelines for Municipal*
  - a. *Shoreland Zoning Ordinances (Chapter 1000 § 13.A) pursuant to the Mandatory Shoreland Zoning Act (38 MRSA §438-A, subsection 1);*
2. *Wetlands of special significance as defined in MDEP Wetlands and Waterbodies Protection Rules (Chapter 310 § 4);*
3. *Significant wildlife habitat as defined in the Natural Resources Protection Act (38 MRSA §480-B(10))*
4. *Threatened, endangered and special concern animal species habitat as identified and mapped by MIFW pursuant to the Maine Endangered Species Act (12 MRSA, Chapter 925);*
5. *Significant freshwater fisheries spawning habitat as identified and mapped by MIFW or MDMR;*
6. *Natural communities that are critically imperiled (S1), imperiled (S2) or rare (S3) as defined and mapped by MNAP;*
7. *Areas containing plant species declared to be threatened or endangered by the MDOC.*
8. *Coastal sand dune systems as defined in the Natural Resources Protection Act (38 MRSA §480-B(1)); [Note: None in the Town of Friendship]*
9. *Fragile mountain areas as defined in the Natural Resources Protection Act (38 MRSA §480-B(3)); [Note: None in the Town of Friendship] or*
10. *National Natural Landmarks designated by the National Park Service pursuant to its National Natural Landmark Program (36 Code of Federal Regulation, Section 62). [Note: None in the Town of Friendship]*

- (2) A map or description of scenic areas and scenic views of local importance, and regional or statewide importance, if available.

The physical character of the Town is exemplified in part by its scenic resources, which contribute to the local quality of life and enhance the value of surrounding properties. Perhaps the most important scenic water views and vistas are those visible to the public from public roads and landings. The natural beauty of Friendship is evident to those who fish, sail and boat along the coast.

**Policies**

- (1) To conserve critical natural resources in the community.  
 (2) To coordinate with neighboring communities and regional and state resource agencies to protect shared critical natural resources.

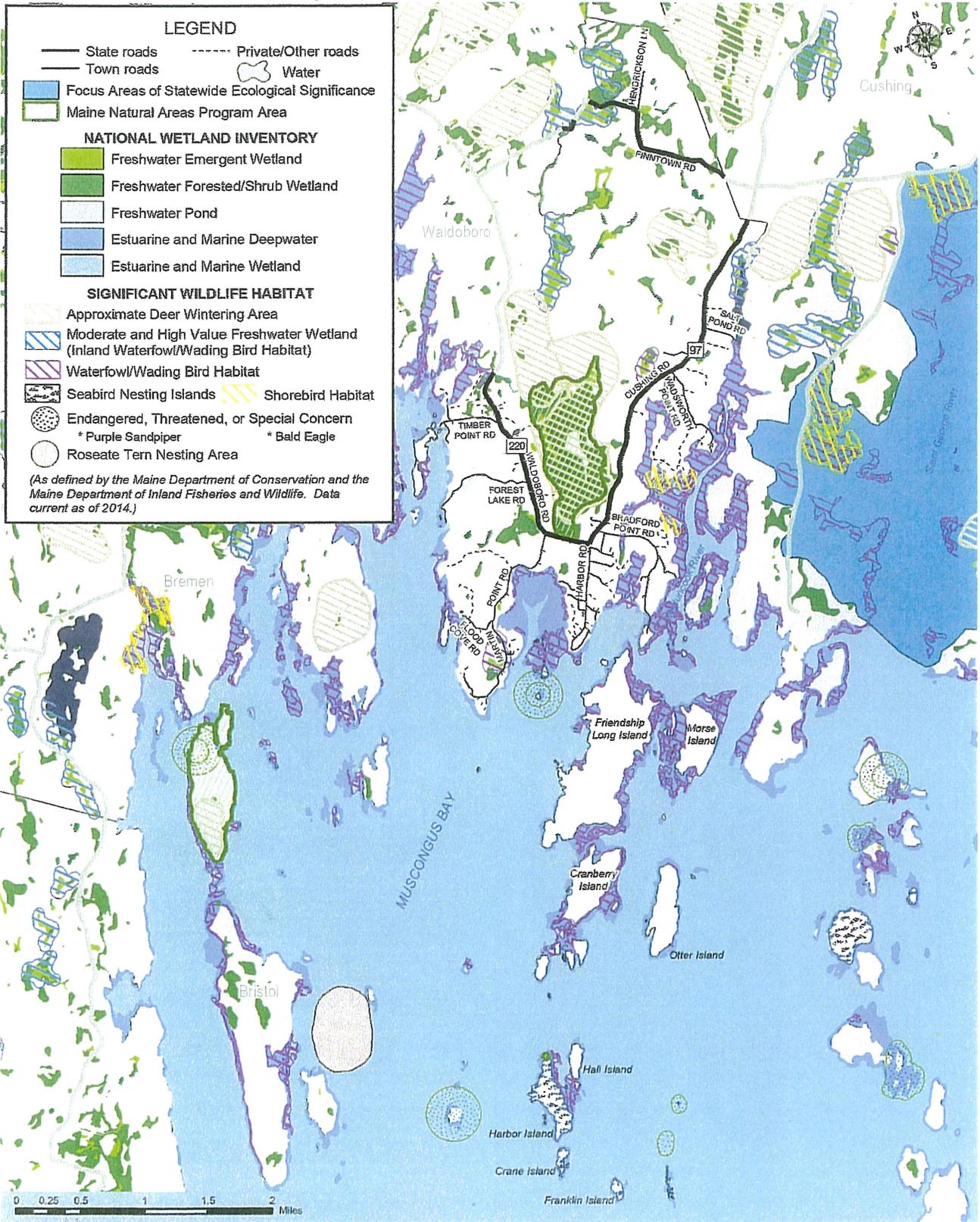
**Strategies**

<b>Natural Resources: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(1) <i>Ensure that land use ordinances are consistent with applicable state law regarding critical natural resources.</i>	Planning Board, Code Enforcement Officer, Ordinance Review Committee, and Town Meeting Vote	Immediate and Ongoing
(2) <i>Designate critical natural resources as Critical Resource Areas in the Future Land Use Plan.</i>	Selectmen, Comprehensive Plan Committee, and Town Meeting Vote	Immediate
(3) <i>Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.</i>	Planning Board, Ordinance Review Committee, Conservation Commission, Code Enforcement Officer, and Town Meeting Vote	Midterm
(4) <i>Through local land use ordinances, require the planning board (or other designated review authority) to include as part of the review process, consideration of pertinent BwH maps and information regarding critical natural resources.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Immediate and Ongoing
(5) <i>Initiate and/or participate in interlocal and/or regional planning, management, and/or regulatory efforts around shared critical and important natural resources.</i>	Selectmen, Planning Board, Conservation Commission, and Code Enforcement Officer	Midterm and Ongoing
(6) <i>Pursue public/private partnerships to protect critical and important natural resources such as through purchase of land or easements from willing sellers.</i>	Selectmen, Conservation Commission, and Property owners	Long Term and Ongoing

Natural Resources: Strategies	Responsible Parties	Timeframe
(7) <i>Distribute or make available information to those living in or near critical or important natural resources about current use tax programs and applicable local, state, or federal regulations.</i>	Town Clerk, Conservation Commission, and Code Enforcement Officer	Immediate and Ongoing

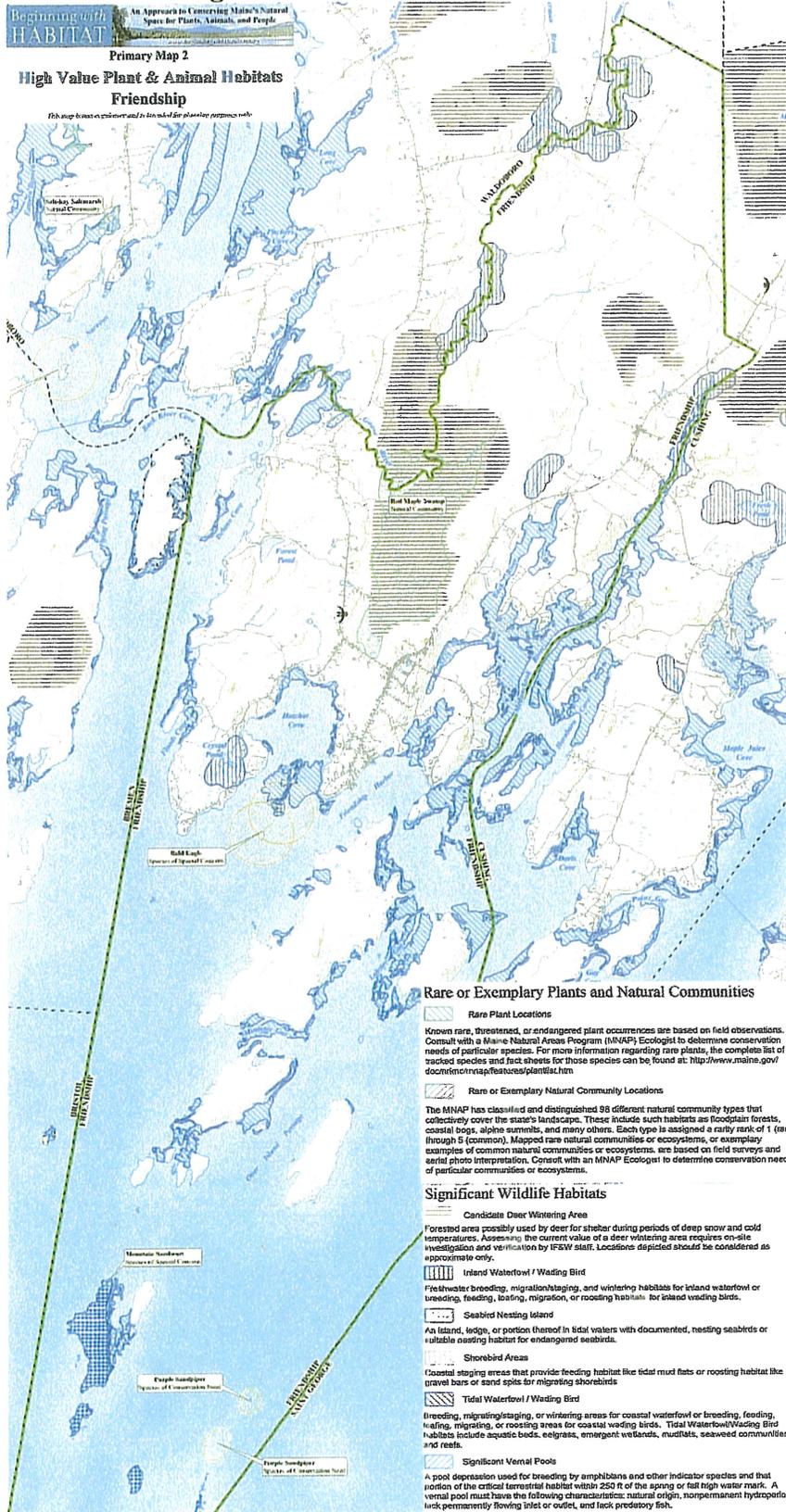
Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

## Summary Natural Constraints, Wetlands and Habitats



Sources: NRCS, USFWS, Maine IF&W, MNAP, MEDOT, MGS, MEGIS

# High Value Plant and Animal Habitats



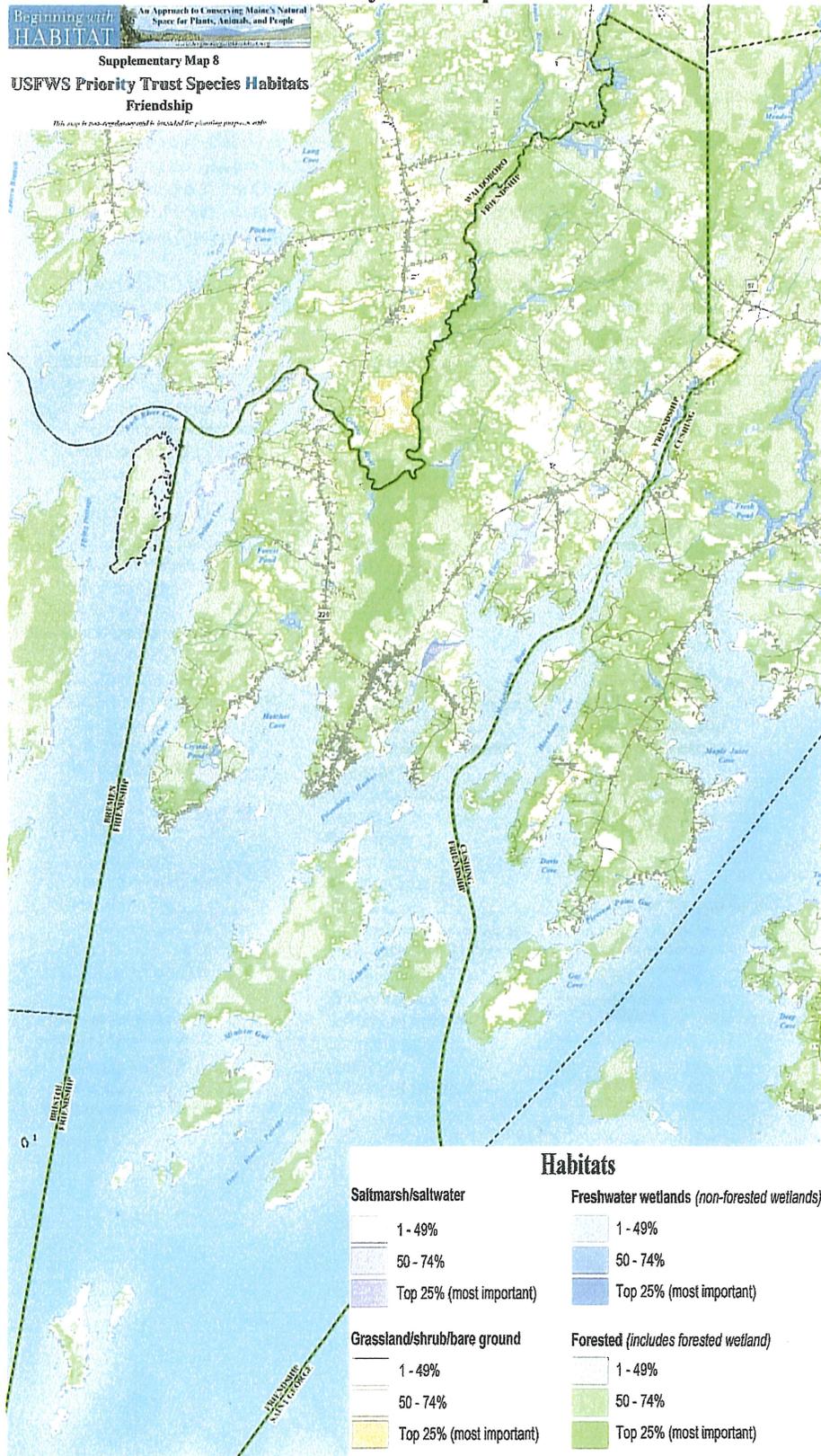
Source: Maine IF&W, 2015

# USFWS Priority Trust Species Habitats

Beginning with HABITAT An Approach to Conserving Maine's Natural Space for Plants, Animals, and People

## Supplementary Map 8 USFWS Priority Trust Species Habitats Friendship

*This map is not intended to be included in planning projects with*



Source: Maine IF&W, 2015. Note: Map legend continues on next page.

# Legend for Wetlands Characterization Map

## LEGEND

This map depicts all wetlands shown on National Wetland Inventory (NWI) maps, but categorized them based on a subset of wetland functions. This map and its depiction of wetland features neither substitute for nor eliminate the need to perform on-the-ground wetland delineation and functional assessment. In no way shall use of this map diminish or alter the regulatory protection that all wetlands are accorded under applicable State and Federal laws. For more information about wetlands characterization, contact Elizabeth Hertz at the Maine Department of Conservation (207-287-8061, elizabeth.hertz@maine.gov).

The Wetlands Characterization model is a planning tool intended to help identify likely wetland functions associated with significant wetland resources and adjacent uplands. Using GIS analysis, this map provides basic information regarding what ecological services various wetlands are likely to provide. These ecological services, each of which has associated economic benefits, include: floodflow control, sediment retention, finfish habitat, and/or shellfish habitat. There are other important wetland functions and values not depicted in this map. Refer to [www.maine.gov/dep/water/wetlands/ipwetfv2.html](http://www.maine.gov/dep/water/wetlands/ipwetfv2.html) for additional information regarding wetland functions and values. Forested wetlands and small wetlands such as vernal pools are known to be underrepresented in the National Wetlands Inventory (NWI) data used to create this map. The model developed to estimate the functions provided by each wetland could not capture every wetland function or value. Therefore, it is important to use local knowledge and other data sources when evaluating wetlands, and each wetland should be considered relative to the whole landscape/watershed when assessing wetland resources at a local level.

-  Organized Township Boundary
-  Unorganized Township
-  Selected Town or Area of Interest
-  Developed: Impervious surfaces including buildings and roads



**Subwatersheds-** The shaded, background polygons are subwatersheds (areas that drain to a particular lake, wetland, pond, river, stream, or the ocean). The subwatersheds are shaded to show topographic relief. This "hillshading" assumes the sun is shining from the northwest, so ridgetops and northwest-facing slopes appear light, whereas valleys and southeast-facing slopes appear dark. Because many areas of Maine are relatively flat, the topographic relief shown here has been exaggerated to make the details easier to see.

### Wetland Functions: Fill Pattern

*Some wetlands may have more than one function (fill pattern)*



#### **RUNOFF / FLOODFLOW ALTERATION**

Wetlands provide natural stormwater control capabilities. As natural basins in the landscape, wetlands are able to receive, detain, and slowly release stormwater runoff. Wetland shelves along stream banks naturally regulate flood waters by providing an area for swollen stream flows to expand and slow, thereby protecting downstream properties. This map assigns Runoff/Floodflow Alteration Functions to wetlands that are (a) contained in a known flood zone, (b) associated with a surfacewater course or waterbody, and (c) with slope < 3%.

**AND/OR**

#### **EROSION CONTROL / SEDIMENT RETENTION**

Wetlands act as natural sponges that can hold water, allowing suspended particles such as sediment to settle out. The dense vegetation in most wetlands helps to stabilize soil and slow water flows, thereby reducing scouring and bank erosion. This map assigns Erosion Control / Sediment Retention functions to wetlands with (a) slope < 3%; (b) emergent vegetation; and (c) close proximity to a river, stream, or lake.



#### **FINFISH HABITAT**

Wetlands with documented finfish populations, including wetlands adjacent to a river, stream, or lake.

**AND/OR**

#### **SHELLFISH HABITAT**

Inland wetlands and streams can directly affect the status of coastal shellfish harvest areas. Fecal coliform bacteria and waterborne nutrients resulting from land use changes away from the coast can travel via surface water to harvestable flats. One failed septic system near a stream could close a mudflat several miles away. Excessive nutrients can reduce water clarity and stimulate epiphytic growth that degrades eelgrass meadows. Conservation of freshwater wetlands and stream buffers in coastal watersheds is a key component in marine resource conservation. This map assigns a Shellfish Habitat function to wetlands within 0.5 miles of (a) identified shellfish habitat, (b) identified shellfish closure areas, or (c) mapped eelgrass beds OR palustrine wetlands directly connected by a stream of < 0.5 mile in length to (a) identified shellfish habitat, (b) identified shellfish closure areas, or (c) mapped eelgrass beds.



#### **PLANT/ANIMAL HABITAT**

Nearly all wildlife species, and many of Maine's plant species, depend on wetlands during some part of their life cycle. For the purposes of this map, wetlands containing open water or emergent vegetation, 3 or more wetland vegetation classes (see below), and within ¼ mile of a known rare, threatened, or endangered plant or animal occurrence, within ¼ mile of a mapped significant or essential habitat, or within ¼ mile of a rare or exemplary natural community have been assigned this function. Rare element occurrences and mapped habitats can be found on Map 2 High Value Plant & Animal Habitats.



#### **OTHER FUNCTIONS**

**CULTURAL/EDUCATIONAL.** Wetlands within ¼ mile of a boat ramp or school have been assigned this value as these wetlands are likely candidates for use as outdoor classrooms, or similar social benefit. Wetlands rated for other functions listed above may also demonstrate cultural/educational values although not expressly shown.

**OR**

**NO DOCUMENTED FUNCTION.** The basis of this characterization is high altitude aerial photos. Photo quality often limits the information that can be interpreted from small wetland features, or those with dense canopy cover. Although not assigned a function under this study, ground surveys may reveal that these wetlands have multiple functions and values.

### Wetland Class: Fill Color



Aquatic Bed (floating or submerged aquatic vegetation), Open Water



Emergent (herbaceous vegetation), Emergent/Forested Mix (woody vegetation >20 ft tall), Emergent/Shrub-Scrub Mix (woody vegetation <20 ft tall)



Forested, Forested/Shrub-scrub



Shrub-scrub

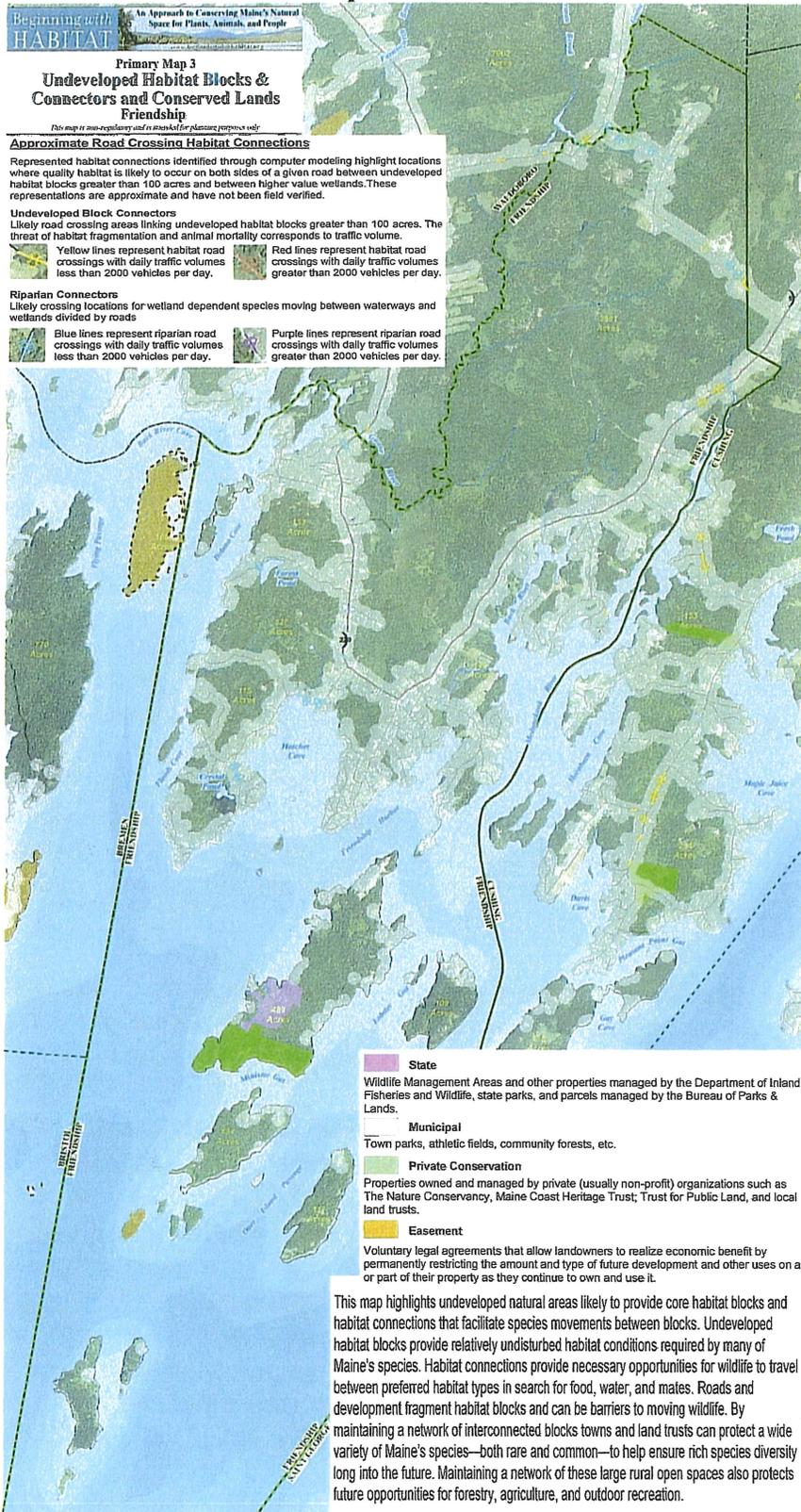


Other (rocky shore, streambed, unconsolidated shore, reef, rocky bottom)

National Wetlands Inventory (NWI) maps (the basis of wetlands shown on this map) are interpreted from high altitude photographs. NWI Wetlands are identified by vegetation, hydrology, and geography in accordance with "Classification of Wetlands and Deepwater Habitats" (FWS/OBS-79/31, Dec 1979). The aerial photographs document conditions for the year they were taken. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, State, or local government. NWI maps depict general wetland locations, boundaries, and characteristics. They are not a substitute for on-ground, site-specific wetland delineation.

Source: Maine IF&W

# Undeveloped Habitat Blocks



Source: Maine IF&W

Note: A Scenic Resources Map TO BE CREATED based upon town input.

## POPULATION AND DEMOGRAPHICS

### Introduction

An important goal of the municipal comprehensive plan is to relate the demographics of a community with its economy, development and environment. Most of the chapters and the recommendations of this plan are dependent upon or strongly influenced by the size and composition of the current and forecasted population. The planning period for this comprehensive plan is ten years.

### State Goal

*None required.*

### Analyses

*(1) Is the rate of population change expected to continue as in the past, or to slow down or speed up? What are the implications of this change?*

After significant growth in the 1970s (19.9%), growth slowed in the 1980s (9.9%) and 1990s (9.6%). Friendship's population peaked in the year 2000 at 1,204 persons. In the first decade of the 2000s, the population declined (-4.3%). Since then the population has continued to decline modestly. In 2015, the estimated population was 1,114. The State projects that Friendship's population will increase to 1,153 persons in 2025 and then decline to 1,143 in 2030. The growth projected will not exceed the population seen in 2000. This will allow the Town the time to better plan for future development, and will limit pressure on local government to expand services. The State forecasts that Knox County as a whole will increase modestly in population from 2015 to 2025 (4.6%) and from 2025 to 2030 (0.6%).

*(2) What will be the likely demand for housing and municipal and school services to accommodate the change in population and demographics, both as a result of overall change and as a result of change among different age groups?*

The median age of Friendship and Knox County residents is increasing. In 2000, Friendship's median age was 42.7, and has since risen to an estimated 54.5 in 2014. The Knox County median age increased from 41.4 in 2000 to an estimated 47.1 in 2014. An age distribution table is shown in the Condition and Trends section below. From 2000 to 2014, Friendship lost population in these age groups: 5-54 and 75-84. The Town gained population in these age groups: under 5, 55 to 74, and 85+. The data suggest that families with young children have left the community, while older individuals have decided to remain here or move into the community. There is variation however among the age groups, so that some young adults may continue to stay in the area if they are able to support themselves, and some older persons may choose to move from Friendship to areas nearby like Rockland and Waldoboro that have multiunit housing and assisted living facilities.

The overall demand for housing might increase, but that increase would be more modest than seen in previous decades. It is possible that if the declining median household size trend continues, which in 2014 was estimated at 2.25 persons for the Town down from 2.49 in 1990, there will be more housing being built than would normally be expected based solely upon the total projected year round population and to meet seasonal (vacation) housing demand. Some existing housing may be modified for elderly residents who wish to stay in their homes, while more accessible new housing is likely to be built for and marketed to persons with age-related physical limitations. See the Housing Chapter for more information including projected housing demand.

The demand for municipal services might change to reflect the aging of the population, for example, home wellness checks, improved street lighting and signage. Other services geared toward the youth might see less demand, for example, youth recreation. The school district encompasses several communities. Since Knox County has seen an aging of its population, it is likely that school enrollments will not increase and could decline. See the Public Facilities and Services Chapter for more information.

*(3) Does your community have a significant seasonal population, is the nature of that population changing? What is the community's dependence on seasonal visitors?*

Friendship has a sizable seasonal population. The Census estimated in 2013 that the Town had 389 units of housing that is for seasonal use, out of 938 total housing units. In 2014, the Census estimated that 421 units of housing were for seasonal use, out of 939 total units. The average family size for the United States was 3.26 in 2013 and 3.23 in 2014. Accordingly, Friendship's seasonal housing might accommodate an additional 1,269 to 1,360 persons. The Town has one bed and breakfast establishment. Some persons rent their homes informally, for which no data is available. The Friendship Days event, which is held annually in Friendship on the last weekend of July, attracts approximately 3,000 visitors over 2 days. A portion of the local and regional economy depends on tourism, and so residents employed in that sector depend on seasonal visitors, who stay predominately in coastal communities. See the Economy and Employment Chapter for more information.

*(4) If your community is a service center or has a major employer, are additional efforts required to serve a daytime population that is larger than its resident population?*

Friendship is not a service center community. Its daytime population is smaller than its resident population. The State Department of Labor recorded in 2014 that most businesses in Town employ between one and four persons each. Four businesses employ between 5-9 persons each, two employ between 20-49 persons, and one employs 50-99 persons. While a sizable percent of Friendship residents work within the Town (43.1% in 2013), most residents who work do so outside of Friendship. See the Economy and Employment Chapter for more information.

**Conditions and Trends**

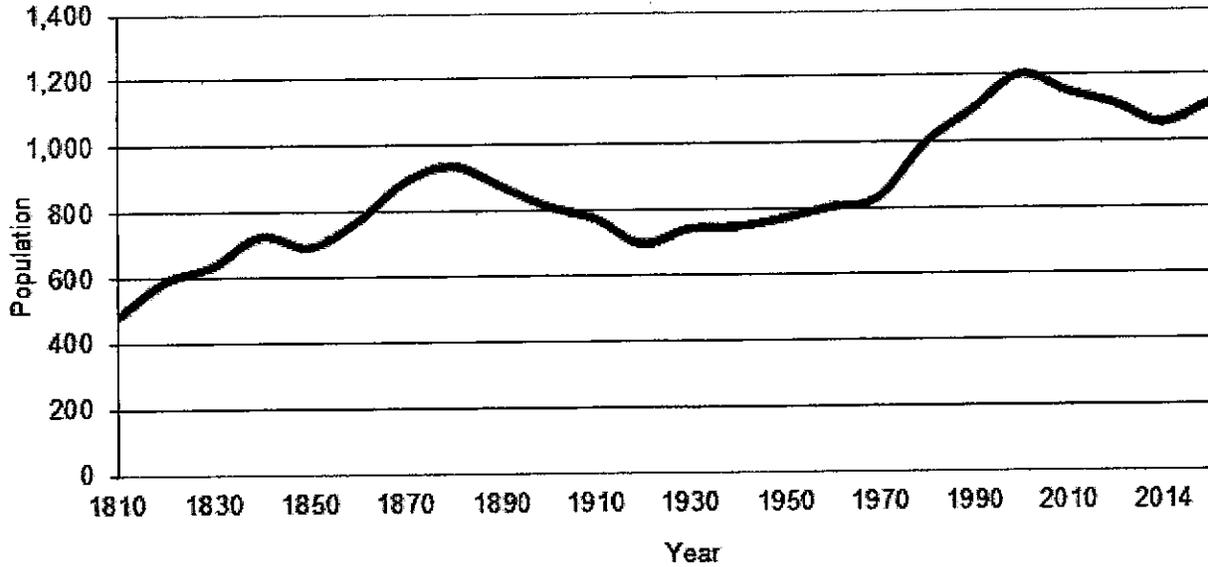
(1) *The community's Comprehensive Planning Population and Demographic Data Set (including relevant local, regional, and statewide data) prepared and provided to the community by the Office or its designee.*

Friendship was incorporated in 1807. Accordingly, the next table starts with the first decennial census year for Friendship, 1810, in which the Town's population was 480. The Town's population rose to 938 in 1880 and declined to 696 in 1920. Since then it increased to a peak of 1,204 in 2000. Current estimates remain below that peak, 1,114 in 2015, and are forecast by the State to reach just 1,153 persons by 2025 and then decline to 1,143 persons by 2030. For planning purposes, the town is anticipated to have no more than 1,200 year round residents by 2027. Knox County, founded in 1860, is forecast to increase modestly in population.

<b>Total Population of Friendship and Knox County</b>				
<b>Year</b>	<b>Friendship</b>	<b>% Change</b>	<b>Knox County</b>	<b>% Change</b>
1810	480			
1820	587	22.3%		
1830	634	8.0%		
1840	725	14.4%		
1850	691	-4.7%		
1860	770	11.4%	32,716	
1870	890	15.6%	30,823	-5.8%
1880	938	5.4%	32,863	6.6%
1890	877	-6.5%	31,473	-4.2%
1900	814	-7.2%	30,406	-3.4%
1910	776	-4.7%	28,981	-4.7%
1920	696	-10.3%	26,245	-9.4%
1930	742	6.6%	27,693	5.5%
1940	747	0.7%	27,191	-1.8%
1950	772	3.3%	28,121	3.4%
1960	806	4.4%	28,575	1.6%
1970	834	3.5%	29,013	1.5%
1980	1,000	19.9%	32,941	13.5%
1990	1,099	9.9%	36,310	10.2%
2000	1,204	9.6%	39,618	9.1%
2010	1,152	-4.3%	39,736	0.3%
2013 Est.	1,114	-3.3%	39,694	-0.1%
2014 Est.	1,057	-5.1%	39,653	-0.1%
2015 Est.	1,114	5.4%	39,455	-0.5%
2025 Proj.	1,153	3.5%	41,253	4.6%
2030 Proj.	1,143	-0.9%	41,516	0.6%

Sources: US Census for 1810-2010, American Community Survey for 2013 and 2014, Claritas for 2015, Maine Office of Policy and Management for 2025 and 2030

### Friendship Population



Sources: US Census for 1810-2010, American Community Survey for 2013 and 2014, Claritas for 2015

The total number of deaths exceeded the number of births to residents from 2000 to 2013. Of the change in population (-90 persons from 2000 to 2013), -12 was due to natural change and -78 was due to out-migration.

Friendship Vitals – Net Migration		
Year	Deaths	Births
2000	14	19
2001	8	13
2002	15	13
2003	13	13
2004	13	12
2005	10	11
2006	8	9
2007	15	13
2008	11	9
2009	9	6
2010	11	5
2011	10	10
2012	14	13
2013	15	8
Total	166	154
<b>Natural Change</b>		-12
<b>Net Migration</b>		-78

Source: Maine Office of Data, Research, and Vital Statistics, 2015

Overall, the population has declined by an estimated 90 persons since 2000 in Friendship, but some age groups in Town have increased in number including those aged under 5, 55 to 74, and 85+. For Knox County, growth was seen in groups aged 20 to 59 and 65 to 84. The median age of Friendship residents has increased by 11.8 years since 2000. Statewide, the median age was 38.6 in 2000 and it increased by 12.7% (4.9 years) to 43.5 in 2014.

Population by Age Estimates	Friendship				Knox County			
	2000	2010	2014	% Change	2000	2010	2014	% Change
Under 5 years	57	45	60	5.3%	2,082	1,921	1,744	-16.2%
5 to 9 years	68	64	26	-61.8%	2,383	2,097	1,954	-18.0%
10 to 14 years	73	61	52	-28.8%	2,762	2,297	2,334	-15.5%
15 to 19 years	81	57	50	-38.3%	2,437	2,135	2,110	-13.4%
20 to 24 years	56	52	31	-44.6%	1,691	1,763	1,823	7.8%
25 to 34 years	126	100	86	-31.7%	2,180	4,025	4,066	86.5%
35 to 44 years	189	115	87	-54.0%	2,475	4,949	4,728	91.0%
45 to 54 years	167	176	158	-5.4%	2,894	6,421	5,980	106.6%
55 to 59 years	76	94	113	48.7%	3,316	3,409	3,455	4.2%
60 to 64 years	74	96	77	4.1%	3,348	3,125	3,238	-3.3%
65 to 74 years	115	162	217	88.7%	3,056	3,983	4,532	48.3%
75 to 84 years	98	91	74	-24.5%	2,232	2,465	2,439	9.3%
85 years +	24	39	26	8.3%	1,930	1,146	1,250	-35.2%
Median Age	42.7	50.1	54.5	27.6%	41.4	46.2	47.1	13.8%

Source: US Census American Community Survey 5-year estimates for 2010-2014

Friendship has had proportionally fewer residents with a high school degree and with a bachelor's degree than Knox County as a whole. See the Public Facilities Chapter for current enrollment figures in area schools.

Educational Attainment	Friendship			Knox County		
	2000	2012	2014	2000	2012	2014
Less than 9th grade	45	31	15	1,001	807	607
9th to 12th grade, no diploma	111	139	78	2,544	1,784	1,376
High school graduate (includes equivalency)	377	364	304	10,306	10,548	10,550
Some college, no degree	117	154	162	5,353	5,646	5,670
Associate degree	20	86	89	1,676	2,182	2,384
Bachelor's degree	143	153	130	4,833	5,948	6,079
Graduate or professional degree	55	59	60	2,590	2,674	3,022
% High School Graduate or Higher	82.0%	82.8%	88.9%	87.5%	91.2%	93.3%
% Bachelor's Degree or Higher	22.8%	21.5%	22.7%	26.2%	29.1%	30.7%

Source: US Census, American Community Survey 5-year estimates for 2008-2012 and 2010-2014

The average household size has decreased in Friendship and Knox County. This trend is due to several factors: a lower proportion of married couples, fewer children per family, and more people living alone longer. Declines in average household size can result in more growth of the housing stock even when population growth is nominal. See the Housing Chapter for more information.

<b>Average Household Size</b>		
<b>Year</b>	<b>Friendship</b>	<b>Knox County</b>
1990	2.49	2.45
2000	2.37	2.31
2010	2.27	2.22
2013	2.22	2.28
2014	2.25	2.26
% Change	-9.6%	-7.8%

Source: US Census, American Community Survey 5-year estimates 2009-2013 and 2010-2014

Friendship family households comprised 74.4% of total households in 1990 and an estimated 70.4% of total households in 2014. The number of family households with children dropped almost in half from 1990 to 2014.

<b>Friendship Households and Families</b>			
<b>Year</b>	<b>Total Households</b>	<b>Family Households</b>	<b>Family Households with related children (under 18 years old)</b>
1990	442	329	141
2000	508	354	131
2010	508	352	107
2013	501	350	74
2014	470	331	75
% Change	6.3%	0.6%	-46.8%

Source: US Census, American Community Survey 5-year estimates 2009-2013 and 2010-2014

Note: "Families" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption.

Knox County family households comprised 68.7% of total households in 1990 and an estimated 62.6% of total households in 2014.

<b>Knox County Households and Families</b>			
<b>Year</b>	<b>Total Households</b>	<b>Family Households</b>	<b>Family Households with related children (under 18 years old)</b>
1990	14,344	9,849	3,168
2000	16,608	10,728	4,698
2010	17,258	10,662	4,297
2013	16,941	10,717	3,686
2014	17,038	10,673	3,587
% Change	18.8%	8.4%	13.2%

Source: US Census, American Community Survey 5-year estimates 2009-2013 and 2010-2014

Females comprised 50.9% of the Town's population in 1990 and an estimated 52.7% in 2014.

<b>Friendship Population by Gender</b>			
<b>Year</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
1990	559	540	1,099
2000	609	595	1,204
2010	571	581	1,152
2013	578	536	1,114
2014	557	500	1,057
% Change	-0.4%	-7.4%	-3.8%

Source: US Census, American Community Survey 5-year estimates 2009-2013 and 2010-2014

Females comprised 51.5% of Knox County's population in 1990 and an estimated 50.5% in 2014.

<b>Knox County Population by Gender</b>			
<b>Year</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
1990	18,707	17,603	36,310
2000	20,291	19,327	39,618
2010	20,073	19,663	39,736
2013	19,998	19,696	39,694
2014	20,013	19,640	39,653
% Change	7.0%	11.6%	9.2%

Source: US Census, American Community Survey 5-year estimates 2009-2013 and 2010-2014

### ***Policies and Strategies***

*None required.*

## RECREATION

### Introduction

The natural resources of Friendship and the region provide numerous recreational opportunities like hiking, hunting, horseback riding, snowmobiling, cross-country skiing, fishing and boating. Open space includes shoreland areas, athletic fields, farms, forestlands, wetlands, ponds, rivers and coastal waters, as described in these chapters of this plan: Agricultural and Forestry Resources, Marine Resources, Natural Resources and Water Resources. The recommendations of this chapter seek to preserve and improve recreational opportunities.

### State Goal

*To promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters.*

### Analyses

(1) *Will existing recreational facilities and programs in the community and region accommodate projected growth or changes in age groups in your community?*

In general, Friendship and the region have the capacity to provide recreational facilities and programs for residents over the ten-year planning period. However, the Town should anticipate an increase or change in demand for recreation programs due to the growing elderly population.

(2) *Is there a need for certain types of services or facilities or to upgrade or enlarge present facilities to either add capacity or make them more usable?*

The Comprehensive Plan Survey conducted in July of 2016, regarding the question of locally available services, identified that ---% of the respondents indicated that the current recreation facilities were adequate, ---% not adequate and ---% needs improvement (and ---% unsure). The same survey reported that ---% felt that existing walking/biking paths were adequate, ---% not adequate, ---% needs improvement (and ---% unsure).

(3) *Are important tracts of open space commonly used for recreation publicly-owned or otherwise permanently conserved?*

Most open space is privately owned with the exception of ponds and coastal waters that are publicly owned and greatly used. The school playground serves the school, and can be used after school by local children. A field across from the school is used for ball games. The school also has a gymnasium, which is a multi-purpose room that can be used after school hours under school regulations. Other tracts of land are permanently conserved within Friendship but have not been generally used for recreation. See the map titled Public Facilities.

- (4) *Does the community have a mechanism, such as an open space fund or partnership with a land trust, to acquire important open spaces and access sites, either outright or through conservation easements?*

The Town itself does not currently have any agreements or partnerships in place to acquire additional open spaces. Individual landowners have conservation easements in place utilizing two land trusts: the Georges River Land Trust and Maine Coast Heritage, which includes islands, and the Maine Audubon Society.

- (5) *Does the public have access to each of the community's significant water bodies?*

The public does have access to the Meduncook River and Friendship Harbor - in the form of the landings and the town wharf. Public access to Hatchet Cove and Muscongus Bay is accessible at Martin Point Beach.

- (6) *Are recreational trails in the community adequately maintained? Are there use conflicts on these trails?*

Recreational trails are primarily on private property including snowmobile trails. In general they are regularly maintained by the snowmobile club.

- (7) *Is traditional access to private lands being restricted?*

Traditionally, year-round residents have viewed unimproved land as a shared resource, e.g. for walking, hunting, etc. and though privately owned, the land is used by residents because everyone knows each other. This has changed, especially along coastal properties, due in part to the influx of new residents, both year-round and seasonal. As more people restrict the use of their land, informal public access to private land becomes increasingly problematic.

### ***Condition and Trends***

*Minimum data required to address Analyses:*

- (1) *The community's Comprehensive Planning Recreation Data Set prepared and provided to the community by the Department of Conservation, and the Office, or their designees.*

See the map titled Public Facilities.

- (2) *A description of important public and private active recreation programs, land and water recreation areas (including hunting and fishing areas), and facilities in the community and region, including regional recreational opportunities as appropriate, and identification of unmet needs.*

### **Recreation Programs:**

Most of the recreational activities in town are informal, and involve individuals, families, and small groups. There is, however, some organized activity.

Senior citizens meet weekly at the Hahn Center for luncheon and organize occasional trips. Many would enjoy more activities. Transportation is definitely a factor. Most school-organized activities take place in Waldoboro where the older grades go to school. At present there is no late bus service, so parental transportation is necessary if their children are to take part. The two churches in town each have youth groups, which sponsor activities. The Advent Church in particular has an active youth program with a paid youth minister. Their activities are open to all town youngsters.

There is less planned recreation for working-age adults. Many go to Waldoboro or Rockland to be in sports leagues, or to the Camden or Damariscotta YMCA for swimming, tennis, etc. In town, the firemen usually have a softball team, and when an enthusiastic and knowledgeable person is willing to teach an activity, he or she usually finds eager participants. In the past, there were roller-skating evenings (in the old town hall), weekly movies, youth swimming lessons, an NRA sponsored rifle club, and aerobics classes.

The Martin Point Improvement Association sponsors summer programs including, lectures, dances, children's programs and tennis lessons primarily for members of the Association. The beach at Martin Point is heavily used by the public in the summer.

#### Recreation Areas within Friendship:

The largest recreation area is the water, which adds many square miles to the town, all of it "public." It is used by almost all residents and summer people for recreation as well as work. Small boating of all kinds, swimming, exploring islands, and picnicking are appropriate here. Artists, amateur geologists and biologists find interesting recreation here. Most of the recreational uses are individual or family based, but sometimes a group will organize sailing races or a group picnic. One kind of commercial recreation is provided by a Friendship Sloop, which takes daily summertime cruises from the town wharf. The town maintains public landings on each of the 3 points and on each of the rivers and a town wharf for public access to the water. The landings are not all easily accessible at low tide. The town wharf is heavily used. Town selectmen and a harbor committee are working out a plan to improve the wharf, provide more parking, and ease the overcrowding during the summer. Beaches along the waterfront are rocky and /or muddy at low tide. All of them are on private property, but are used by many people, and usually with respect.

There are no town-owned public parks as such. The school playground serves the school, and may be used after school by local children. There is a field" across from the school, which is used for ball games. It is rather small and needs a better surface. The school also has a gymnasium, which is really a multi-purpose room.

The Hahn Center is owned by the town and has a kitchen and other gym or all-purpose room. It is heavily used for basketball and other games, public and private parties, dinners, meetings, shows, etc. The Fire Station is used sometimes as an "overflow area" when the Hahn Center is in use.

The two church buildings in town are used primarily for church-related activities: youth groups, meetings, suppers, "fairs," etc., and may be used for some public functions.

The library, besides providing books and magazines, is used for meetings, story-hours and reading groups.

There are at least 7 tennis courts in town, but all are private. Some are owned by individuals and some by local associations. They provide recreation opportunities for their owners and friends. Some of the courts might be available for others when properly supervised or by special invitation. Liability issues would have to be addressed.

Forest Lake is much used for fresh water swimming and for ice skating when conditions are right. Its location beside the road makes access easy. So far, parking beside the road has not been a problem.

The 95-acre Nelson Nature Preserve, owned by the Mid-Coast Chapter of the Audubon Society provides several miles of walking trails and habitat for wildlife and nature-lovers. Much of the protected land is wetland, from upland mixed forest to unique red maple swamp fronting the Goose River. Proximity to the coast makes this an excellent spring birding location for warblers and year-round for dense forest-dwellers such as thrush family and woodpeckers.

The islands surrounding Friendship are much used for picnicking and beachcombing. Most are privately owned, but the drastic increase on waterfront property values has forced several owners to give their islands to the town or to the state. Several are state refuges for sea birds (see separate section on islands)

There is still some land left for those who know where to go for hunting, berry picking, and just walking. It is privately owned.

Conservation easements currently held by the Medomak Valley Land Trust in Friendship include the following properties, some of which may be used for passive recreational activities:

- Cranberry Island, 55 acres, 1997
- Crotch Island, 61 acres, 2004
- Delano Cove, 31 acres, 2004
- Lane, 12 acres, 2007
- Shannon, 40 acres, 2007
- Martin Point Wildlife Reserve, 50 acres, 2013

#### Recreation Areas within the Region:

- Beech Hill Preserve (Rockport)
- Camden Hills State Park
- Thomaston Village Trail - Georges Highland Path
- Jack Baker Woods (Thomaston)
- Oyster River Bog (Thomaston/Rockland)
- Pleasant Point Nature Preserve (Cushing)
- Rockland Harbor, including Rockland Breakwater
- Thomaston Town Forest

Recreation needs of Friendship residents include adequate ongoing maintenance of the Town's limited recreational facilities, including the school playground and ballfield, and trails through open spaces, as well as the consideration of the hosting of recreational programs within Friendship.

(3) *An inventory of any fresh or salt water bodies in the community determined locally to have inadequate public access.*

Fresh water bodies located in Friendship include Forest Pond and Crystal Pond, which do not have dedicated public access. The saltwater bodies include Meduncook River, Friendship Harbor, Hatchet Cove and Muscongus Bay. Public access is available to coastal waters at these town landings:

Public Access	Overall Condition	Improvements Needed
Timber Point Landing	Good/Very Good	
Hatchet Cove Landing	Good/Very Good	
Friendship Harbor Town Wharf	Good	Replace pilings
Bradford Point Landing	Good/Very Good	
Wadsworth Point Landing	Good/Very Good	

Parking is limited at the Town Wharf and the landings.

(4) *A description of local and regional trail systems, trail management organizations, and conservation organizations that provide trails for all-terrain vehicles, snowmobiling, skiing, mountain biking, or hiking*

Trails include --- along --- and snowmobile trails traversing over privately owned land located mostly between --- and maintained by --- Snowmobile Club. Cross-country ski trails on property own by the ---, accessed via ---.

(5) *A map or list of important publicly-used open spaces and their associated facilities, such as parking and toilet facilities.*

See the map titled Public Facilities.

**Policies**

- (1) To maintain/upgrade existing recreational facilities as necessary to meet current and future needs.
- (2) To preserve open space for recreational use as appropriate.
- (3) To seek to achieve or continue to maintain at least one major point of public access to major water bodies for boating, fishing, and swimming, and work with nearby property owners to address concerns.

**Strategies**

Recreation: Strategies	Responsible Parties	Timeframe
(1) Create a list of recreation needs or develop a recreation plan to meet current and future needs. Assign a committee or community official to explore ways of addressing the identified needs and/or implementing the policies and strategies outlined in the plan.	Selectmen and Recreation Committee	Immediate and Ongoing
(2) Work with public and private partners to extend and maintain a network of trails for motorized and non-motorized uses (walking and hiking). Connect with regional trail systems where possible.	Selectmen and Recreation Committee	Midterm
(3) Work with an existing local land trust or other conservation organizations to pursue opportunities to protect important open space or recreational land. <ul style="list-style-type: none"> <li>• There may be opportunities to negotiate with private landowners to protect open space.</li> </ul>	Selectmen and Recreation Committee	Long Term
(4) Provide educational materials regarding the benefits and protections for landowners allowing public recreational access on their property. At a minimum this will include information on Maine's landowner liability law regarding recreational or harvesting use, Title 14, M.R.S.A. §159-A.	Selectmen and Recreation Committee	Immediate and Ongoing

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

## REGIONAL COORDINATION PROGRAM

### Introduction

Comprehensive planning recognizes the importance of regional cooperation and coordination. The land uses in one community can impact another community, particularly when that land use is located near the boundaries of the town. Friendship is bordered by the Meduncook River and Town of Cushing to the east, the Town of Waldoboro to the northwest, and Muscongus Bay and Bremen to the west. Friendship and its residents are dependent upon the region, especially the service center communities of Rockland and Waldoboro, for commercial goods and services, medical services and employment opportunities.

It is imperative for safety, security, environmental and economic reasons including cost savings that Friendship coordinate and cooperate with federal, state, county, regional and local municipal governments and organizations as much as possible.

### State Requirement

*Pursuant to 30-A M.R.S.A. §4326(4), a regional coordination program must be pursued with other communities to manage shared resources and facilities, including but not limited to lakes, rivers, aquifers, and transportation facilities. The plan must identify any shared resources and facilities, describe any conflicts with neighboring communities' policies and strategies pertaining to shared resources and facilities and describe what approaches the community will take to coordinate management of shared resource and facilities. In addition, the plan must include a summary of regional coordination efforts from all applicable topic areas.*

### Municipal Comprehensive Plans and Ordinances

Neighboring Waldoboro has adopted a comprehensive plan that is consistent with state law, while Bremen and Cushing have not, as shown in the following table.

Community	Comprehensive Plan Adoption/Amendment Date	Consistent with State laws
Bremen	None	No (State findings 3/10/2003)
Cushing	None	No (State findings 7/6/2007)
Waldoboro	Yes 1998, Amended 2005	Yes (State findings 10/8/1997)

All surrounding towns have shoreland zoning ordinances. Waldoboro has adopted zoning beyond shoreland zones as well. Surrounding towns have site plan review provisions, subdivision ordinances and floodplain management, among other ordinances. The bordering zoning districts are generally complementary with one another.

## **Summary of Current Regional Coordination**

The following is a list of inter-municipal and regional efforts in which Friendship participates:

- Emergency dispatch through the Knox County Regional Communications Center.
- Fire and rescue participation in countywide mutual aid program, as well as contracted services for Emergency Medical Services with Waldoboro.
- Municipal solid waste disposal and recycling through an inter-local agreement among Waldoboro, Friendship and Cushing using the Waldoboro Solid Waste Transfer Station. In turn, through membership in the Municipal Review Committee, which serves 187 Maine municipalities, municipal solid waste is transported to the Penobscot Energy Recovery Company, L.P. (PERC) waste-to-energy facility in Orrington.
- Police protection through a contract with the Knox County Sheriff's Department.
- Public education as a member of RSU 40, which serves Friendship, Union, Waldoboro, Warren, and Washington.
- Regional emergency and disaster planning through the Knox County Emergency Management Agency.
- Sand and salt countywide bidding process for winter road usage.
- Friendship/Cushing Food Pantry

For more information, please see the Public Facilities and Services Chapter.

## **Regionally Provided Public Services**

As noted above, key public services are provided on a regional basis. Police service is furnished by Knox County. Fire Department and EMS participate in a regional mutual aid programs. Medical service is primarily provided by the Penobscot Bay Medical Center in Rockport and Miles Memorial Hospital in Damariscotta. Public education is provided through RSU 40, which serves five municipalities. See the Public Facilities and Services Chapter.

## **Shared Natural Resources**

Friendship, Bremen and Waldoboro have shoreline on Muscongus Bay with principally residential and recreational uses. Friendship and Cushing have shoreline on the Meduncook River, which is predominantly residential and recreational with small portions used for marine related commercial activities. All surrounding communities have shoreland zoning ordinances in effect. An effort to coordinate shoreland zoning further, beyond state requirements might be warranted to enhance shared natural resources that support the local economy and protect the health of residents and of marine wildlife. See the Marine Resources Chapter and Land Use Chapter.

Most residents depend upon wells for drinking water and some groundwater resources extend beyond the Town into neighboring Waldoboro. Accordingly, cooperation on the review of any large-scale development proposals that could affect this resource should be shared between Friendship and Waldoboro. See the Water Resources Chapter and Land Use Chapter.



## **Regional Economy**

Many Friendship residents depend upon the regional economy for their livelihoods. The service centers of Rockland and Waldoboro meet some of the needs of residents that are not provided within the Town itself. Friendship shares with other towns within commuting distance the effects of regional economic activities. See the Economy Chapter for more information.

### **Regional Policies from the other chapters of this comprehensive plan**

- *To cooperate with neighboring communities and regional/local advocacy groups to protect water resources.* See the Water Resources Chapter.
- *To coordinate the community's land use strategies with other local and regional land use planning efforts.* See the Land Use Chapter, Future Land Use Plan.
- *To coordinate with neighboring communities and regional and state resource agencies to protect shared critical natural resources.* See the Natural Resources Chapter.
- *To coordinate with regional development corporations and surrounding towns as necessary to support desired economic development.* See the Economy Chapter.
- *To encourage and support the efforts of the regional housing coalitions in addressing affordable and workforce housing needs.* See the Housing Chapter.
- *To prioritize community and regional needs associated with safe, efficient, and optimal use of transportation systems.* See the Transportation Chapter.
- *To coordinate the community's land use strategies with other local and regional land use planning efforts.* See the Land Use Chapter, Future Land Use Plan.

**Regional Strategies from the other chapters of this comprehensive plan**

<b>Regional: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(1) <i>Participate in local and regional efforts to monitor, protect and, where warranted, improve water quality.</i>	See the Water Resources Chapter for specific strategies, responsibilities, and timeframes.	
(2) <i>Initiate and/or participate in inter-local and/or regional planning, management, and/or regulatory efforts around shared critical and important natural resources.</i>	See the Natural Resources Chapter for specific strategies, responsibilities, and timeframes.	
(3) <i>Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.</i>	See the Agriculture and Forest Resources Chapter for specific strategies, responsibilities, and timeframes.	
(4) <i>Support implementation of local and regional harbor and bay management plans.</i>	See the Marine Resources Chapter for specific strategies, responsibilities, and timeframes.	
(5) <i>If appropriate, assign responsibility and provide financial support for economic development activities to the proper entity (e.g., a local economic development committee, a local representative to a regional economic development organization, the community's economic development director, a regional economic development initiative, or other) and Participate in any regional economic development planning efforts.</i>	See the Economy Chapter for specific strategies, responsibilities, and timeframes.	
(6) <i>Create or continue to support a community affordable/workforce housing committee and/or regional affordable housing coalition and Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs.</i>	See the Housing Chapter for specific strategies, responsibilities, and timeframes.	
(7) <i>Initiate or actively participate in regional and state transportation efforts</i>	See the Transportation Chapter for specific strategies, responsibilities, and timeframes.	
(8) <i>Explore options for regional delivery of local services.</i>	See the Public Facilities and Services Chapter for specific strategies, responsibilities, and timeframes.	

# TRANSPORTATION

## Introduction

A safe and dependable transportation system is the lifeline of every community. This chapter details the current condition and usage of Friendship's transportation system. The purpose of this chapter is to plan for the efficient maintenance and improvement of the transportation system in order to accommodate existing and anticipated development. The format and outline of this chapter follows the State Comprehensive Plan Criteria Rule, as amended on 8/6/11.

### A. State Goal

*To plan for, finance and develop an efficient system of [transportation-related] public facilities and services to accommodate anticipated growth and economic development.*

### B. Analyses

1. *What are the transportation system concerns in the community and region? What, if any, plans exist to address these concerns?*

#### Safety:

Maine DOT records no high crash locations where eight or more crashes have been reported within a three-year period on Friendship roadways. However, local concern has been expressed for these road segments/intersections: ---. Route/road --- is in poor condition, making driving the posted speed difficult and dangerous. Intersections with inadequate lighting for motorists and pedestrians include ---.

The following improvements would increase safety for motorists and pedestrians:

- Enhance navigation signs, guide signs, and warning signs.
- Adjust street name signs and/or replace with larger signs for better visibility for drivers and for emergency response.
- Access management strategies: Limit curb cuts by consolidating separate entrances that are close together, and regulate requests for new entrances to ensure adequate site distances.
- Install modern (MUTCD compliant) crosswalk warning signs.
- Coordinate impact fees charged by the State and Town for needed transportation improvements resulting from proposed development.

#### Traffic speed:

Except when conditions or other regulations require a lower speed, the following are maximum rates of speed, unless posted otherwise: 15 m.p.h. in a school zone at specific times of the day, 25 m.p.h. in a business or residential area or built up portion, 45 m.p.h. on all other public ways. Speeding is of concern on these roads: Route 97, Route 220,

and Harbor Rd. Ongoing police enforcement is very costly. The use of traffic calming strategies in road design could decrease the amount of enforcement needed to reduce speeding.

#### Congestion and travel delay:

See the Transportation Network Map for the level of service (LOS) of state and local roads. LOS is a measure of congestion and delay. The lowest LOS found in Friendship is B for portions of Harbor Rd. All other roads in town are LOS A. Roadways have not reached their maximum capacities. Delays where the travel speed is lower than the posted speed are rare on average. Delays on roads do occur mostly during the summer tourist season.

#### Travel volume and type:

See the Transportation Network Map for annual average daily traffic volumes at key points on roadways in Friendship in 2013. The major roads accessing Friendship, Route 97 and Route 220 have the highest volumes, ranging from 1,570 on Route 220 west of the Route 97 intersection, to 1,420 on Route 97 east of the Route 220 intersection, and 1,060 on Route 97 south of the Salt Pond Rd intersection. Harbor Rd had a volume of 1,320 south of the Route 97/220 intersection. Finntown Rd had a volume of 550 at the Waldoboro town line. Salt Pond Rd had a volume of 270 east of the Route 97 intersection. Seasonal volumes (highest in July and August) are approximately 1.5 times greater than the annual averages for state roadways. Private passenger vehicles comprise most of the volumes on Friendship roadways. Importantly, nearly all consumer goods for sale in Friendship are trucked into the Town, and Friendship businesses depend upon the road network to truck most of their goods out of the Town.

#### Road and bridge design and maintenance:

The Town is concerned that all roadways and bridges be well engineered and built to last. Substandard design or construction will result in higher costs to taxpayers and/or subdivision associations for repair. Road damage from flooding, adverse weather conditions and from use, especially heavy trucking activity, requires that roads be built to appropriate standards, including sufficient sub-bases, drainage systems and grading. While this may cost more upfront, in the long term it will reduce costs for the taxpayers, residents, and business owners, all of whom depend on the road network.

Road maintenance is an ongoing effort and municipal budgets are often stretched as the cost of such maintenance increases much faster than the costs of other goods and services, due principally to the costs of petroleum and petroleum-based products like asphalt. The state and federal match for such work has always been important and has become even more crucial to maintain safe roadways.

#### Accessibility:

Outside of the village, Friendship is accessible primarily by motor vehicles. Parking adequate for current and projected future use is found at schools, recreation, shopping and public gathering areas, with the exception of landings. Municipal parking lot

locations and capacity are noted in C.3. below. The lots augment the onsite parking provided at shopping and other locations. Current and recommended pedestrian and bicycle routes are noted in B.8. and C.2. Concern for improving the safety of these routes has helped shape the recommendations in this chapter. Residents in general, especially children and the elderly should be able to get around portions of the Town without depending on motor vehicles exclusively.

Friendship and the region lack alternative transportation options in comparison with more densely developed areas, and so residents are largely dependent on their privately-owned vehicles for daily trips to work, stores and elsewhere. Busses bring children to and from public schools. See C.8. for a description of current public transportation services.

Closed or posted bridges or roads:

There are no --- closed roads. Meduncook Bridge, known locally as Salt Pond Bridge, on Salt Pond Road had been closed, with repairs completed in 2016. The following roads have been posted with weight restrictions seasonally in recent years: ---.

2. *Are conflicts caused by multiple road uses, such as a major state or U.S. route that passes through the community or its downtown and serves as a local service road as well?*

As a peninsular community, Friendship has little through traffic. State Routes 97 and 220 are the primary roads connecting the Town to the region. These roads serve local commerce and neighborhoods as well. See the Transportation Network Map for traffic volumes. Different uses can create conflicts, especially in regards to speed. The enforcement of posted speeds and adequate road design are crucial to counteract these conflicts and the hazards they can create.

3. *To what extent do sidewalks connect residential areas with schools, neighborhood shopping areas, and other daily destinations?*

Friendship has just a few short sidewalks in the village. The remainder of the Town does not have sidewalks.

4. *How are walking and bicycling integrated into the community's transportation network (including access to schools, parks, and other community destinations)?*

Pedestrians and bicyclists use roadway shoulders, which are narrow in many places, or use the travel lanes where there are no shoulders. Heavier vehicular volumes in summer and speeding (year-round) threaten the safety of pedestrians and bicyclists. The addition of sidewalks or multi-use paths in certain areas as noted in the strategies section of this chapter could improve this situation, but would require spending public funds and the cooperation of private landowners.

5. *How do state and regional transportation plans relate to your community?*

The 2010-2011 'Connecting Maine' Statewide Long-Range Transportation Plan 2008-2035 provides overall goals for the maintenance and improvement of the state transportation system to meet the needs of residents and businesses. These goals agree generally with this comprehensive plan. There are no Friendship specific projects or impacts included in the Long Range Maine DOT plan. In general, the lack of adequate funding to preserve and enhance the state transportation network will continue to affect Morrill along with many other Maine communities.

The Maine DOT Work Plan Capital and Maintenance 2017, 2018 and 2019 includes no projects for Friendship.

The previous work plan included these projects for Friendship:

- Goose River Bridge (Friendship, Waldoboro): 2014 Maintenance - Bridge/Structures (est. \$26,000): Add guardrail attachments and repair posts of Goose River Bridge (No. 5265) which carries Route 220 (Waldoboro Road) over Goose River at Friendship-Waldoboro town line.
- Route 97 (Warren, Cushing, Friendship): 2014 Maintenance – Drainage (est. \$56,000): Ditching beginning at Route 1 in Warren and extending southerly 9.45 miles.
- Finntown and Col. Stairs Rd (Waldoboro, Friendship, Cushing): 2014 Maintenance – Drainage (est. \$29,000): Ditching beginning at Route 220 in Waldoboro and extending easterly 3.74 miles.
- Route 220 (Friendship, Waldoboro): 2014 Maintenance – Drainage (est. \$22,000): Ditching beginning at Route 27 in Friendship and extending northwesterly 15.03 miles, including culvert work.

6. *What is the community's current and approximate future budget for road maintenance and improvement?*

The Urban-Rural Initiative Program/Local Road Assistance Program payments for fiscal years 2007 through 2013 was \$19,788. For fiscal year 2014, it was \$16,332. For fiscal year 2015, the amount will be \$14,976.

In 2013, Maine DOT maintenance in Friendship included:

- 2,203.00 Linear Feet of Backhoe Ditching
- 34,108.00 Linear Feet of Grader Ditching
- Drainage Structures Installed or Replaced
- 225.00 Linear Feet of Shoulder Rebuilt
- 2,350.00 Linear Feet of Brush Removed

- 32.30 Miles of Striping Applied
- 2.25 Ton(s) of Cold Patch Applied
- 0.75 Shoulder Miles of Sweeping

Future municipal funding for road improvement and maintenance for Friendship are estimated at \$--- for 2017 though ---.

Road maintenance is an ongoing effort and municipal budgets are often stretched as the cost of such maintenance increases much faster than the costs of other goods and services, due principally to the expense of petroleum and petroleum-based products like asphalt. The state and federal match for roadwork has always been important and has become even more crucial to maintain safe roadways.

7. *Are there parking issues in the community? If so what are they?*

Parking is generally sufficient in most parts of the Town, with the exception of these areas: landings. During these seasonal events, parking is limited in these areas, requiring the transport of people from satellite parking lots.

Parking standards in the Site Plan Review Ordinance do not generally push development out of the village area.

Pedestrian circulation and parking standards are included in the Site Plan Review Ordinance currently to enhance safety and promote pedestrian use.

Additional parking is needed in these areas: town landings. Parking structures are not needed.

9. *Do available transit services meet the current and foreseeable needs of community residents? If transit services are not adequate, how will the community address the needs?*

Friendship and the region lack alternative transportation options in comparison with more densely developed areas, and so residents are largely dependent on their privately owned vehicles for daily trips to work, stores and elsewhere. Busses bring children to and from public schools. See C.8. for a description of current public transportation services.

10. *If the community hosts a transportation terminal, such as an airport, passenger rail station, or ferry terminal, how does it connect to other transportation modes (e.g. automobile, pedestrian, bicycle, transit)?*

Friendship does not host a transportation terminal.

11. *If the community hosts or abuts any public airports, what coordination has been undertaken to ensure that required airspace is protected now and in the future? How does the community coordinate with the owner(s) of private airports?*

There are no airports within Friendship. The Knox County Airport is about 19 miles from the Friendship town line, so development within Friendship would not interfere with that airport's operations or airspace.

12. *If you are a coastal community are land-side or water-side transportation facilities needed? How will the community address these needs?*

Improvements needed to public landings, public wharfs and public docks are noted in the Marine Resources Chapter.

There are no regularly scheduled public ferry services provided from or to Friendship.

13. *Does the community have local access management or traffic permitting measures in place?*

Friendship currently has no access management permit requirement for driveways or entrances. However, the Friendship Subdivision Ordinance (adopted 2001) states in Section 12.2 that access design shall be based on the estimated volume using the access...and conform to the Maine DOT publication, *Access Management: Improving the Efficiency of Maine Arterials*. Those wanting a new curb cut (driveway or entrance access) on a state road have to obtain a permit from Maine DOT.

State access management rules apply to state and state aid roads. The Town believes that these have been helpful. The Town may choose to enact stricter access management standards than the State. To date, there has not been a willingness to do so.

14. *Do the local road design standards support the community's desired land use pattern?*

The Friendship Subdivision Ordinance has road design standards, without regard to roadway volumes, and construction standards in Section 12.2. Since 2001, there have been no new subdivision roads built.

15. *Do the local road design standards support bicycle and pedestrian transportation?*

Yes, to some degree. The Site Plan Review Ordinance (enacted 1999, amended 2005) has the following provision for pedestrian circulation:

The site plan must provide for a system of pedestrian ways within the

development appropriate to the type and scale of development. This system must connect the major building entrances/exits with parking areas and with existing sidewalks, if they exist or are planned in the vicinity of the project. The pedestrian network may be located either in the street right-of-way or outside of the right-of-way in open space or recreation areas. The system must be designed to link the project with residential, recreational, and commercial facilities, schools, bus stops, and existing sidewalks in the neighborhood or, when appropriate, to connect with amenities such as parks or open space on or adjacent to the site.

The Subdivision Ordinance (enacted 2001), states, “Where necessary to safeguard against hazards to traffic and pedestrians and/or to avoid traffic congestion, provision shall be made for turning lanes, traffic direction islands, frontage roads, sidewalks, bicycle ways, and traffic controls within existing streets.” Specific standards for sidewalks and paths are not included but the Recommended Guidelines for Subdivision Streets published by the Institute of Traffic Engineers is referenced. The Subdivision Ordinance also allows the Planning Board to require easements at the end of dead end streets to provide for pedestrian paths to the next street, which would also benefit cyclists.

16. *Do planned or recently built subdivision roads (residential or commercial) simply dead-end or do they allow for expansion to adjacent land and encourage the creation of a network of local streets? Where dead-ends are unavoidable, are mechanisms in place to encourage shorter dead-ends resulting in compact and efficient subdivision designs?*

Since 2001, there have been no major subdivisions in which a new road was constructed. The Subdivision Ordinance allows the Planning Board to require easements in line with the terminus of a dead end street to provide for a continuation of the road where future subdivision is possible. The Subdivision Ordinance also allows for cluster developments in Section 12.10 with shorter subdivision roads and compact design possible.

**C. Conditions and Trends**

*Minimum data required to address state goals:*

1. *The community's Comprehensive Planning Transportation Data Set prepared and provided to the community by the Department of Transportation, and the Office, or their designees.*

Note: This data set has been incorporated and updated in the Transportation Network Map.

2. *Location and overall condition of roads, bridges, sidewalks, and bicycle facilities, including any identified deficiencies or concerns.*

The Transportation Network Map shows the locations of roads and bridges. Road deficiencies include: ---. . Few sidewalks are located along these streets within the village: Harbor Rd. Pedestrian improvements to address safety concerns are in the implementation strategies sections.

According to Maine DOT, Friendship has 20.71 miles of public roads, of which 12.36 miles are town roads and 8.35 miles are State or State Aid roads. About ----% of the town roads are paved. Named private subdivision roads and lanes (often shared driveways listed with E-911) are also shown in the table below. The State and town roads are vitally important as they allow residents to commute to work, school, stores, and around the town. The overall condition (poor, fair, good, or excellent) of each road way is noted. [THE TOWN MAY WISH TO SEPARATE ROADWAYS INTO TWO TABLES: PUBLIC AND PRIVATE.]

**Friendship Roadway Inventory**

Roadway	Owned/Maintained	Surface	Condition
Back River Ln			
Bailey Hill Dr			
Baird Dr			
Ballou Pt			
Balsam Ln			
Barrett Ct			
Bartlett Dr			
Bay Point Dr			
Bayberry Dr			
Bayview Ct			
Bayview Rd			
Benner Ln			
Birch Dr			
Blueberry Ln			
Bolton Ln			
Bradford Point Rd			
Brians Wharf			

Roadway	Owned/Maintained	Surface	Condition
Bums Dr			
Cedar Ln			
Cobb Ln			
Cottage Dr			
Cove Way Ln			
<b>Cushing Rd (Route 97)</b>	State	Paved	
Cyrus Ln			
Davis Point Loop			
Deer Landing Path			
Delano Cove Rd			
Drews Ln			
Duane Dr			
Eby Ln			
Edgerton Dr			
Eelgrass Ln			
Finntown Rd	Town	Paved	
Flood Cove Rd			
Flowers Lu			
Forest Lake Rd			
Garboard Ln			
Goosriver Cove Ln			
Greystone Wy			
Harbor Hill Ln			
Harbor Rd			
Harleys Dr			
Haviland Dr			
Hendrickson Ln			
Heron Ln			
Hoffses Cor			
Homeland Ln			
Horton Wy			
Jameson Dr			
Jones Ln			
Kaler Ln			
Keelson Ln			
Kendra Ln			
Krueger Ln			
Log Cabin Dr			
Lonergan Dr			
Macilvaine Ln			
Main St			
Marks Dr			
Martin Point Rd			

Roadway	Owned/Maintained	Surface	Condition
Marys Loop			
Mattson Ln			
Meduncook Dr			
Morning Side Ln			
Morse Ln			
Moulton Ln			
Neubig St			
Noahs Wy			
N Harbor Cemetery Ln			
No Harbor Side Ln			
Oak Ridge Ln			
Oceanward Dr			
Pine Cove Ln			
Powell Ln			
Rawstron Dr			
Richards Point Ln			
Roberts Ln			
Rogers Wy			
Rufus Dr			
Salt Pond Rd			
School St			
Seaside Farm Dr			
Shipyards Rd			
Simmons Ln			
S Harbor Cemetery Ln			
S Harbor Side Ln			
Spruce Ledge Ln			
Sterling Ln			
Tamarack Rd			
Tideview Ln			
Timber Point Rd			
Town Landing Rd			
Trunnel Ln			
Wadsworth Pt Rd			
<b>Waldoboro Rd (Route 220)</b>	State	Paved	
White Cedar Rd.			
Wieluns Dr			
Windward Ln			
Wotton Dr			
Young Dr			

3. *Identify potential on and off-road connections that would provide bicycle and pedestrian connections to neighborhoods, schools, waterfronts and other*

activity centers.

None are recommended.

4. *Identify major traffic (including pedestrian) generators, such as schools, large businesses, public gathering areas/activities, etc. and related hours of their operations.*

Major Traffic Generators	Hours of Operation
Friendship Village School	

Major Events/Activities	Dates
Friendship Days	Last 2 weeks in July

- (5) *Identify policies and standards for the design, construction and maintenance of public and private roads.*

The Friendship Subdivision Ordinance has road design and construction standards in Section 12.2. The ordinance states, "All roads within the subdivision shall remain private roads to be maintained by the developer or the lot owners and shall not be accepted or maintained by the Town, until they meet the Town of Friendship street design and construction standards." Since 2001, no formerly private subdivision roads have been accepted as public roads through town meeting vote.

- (6) *List and locate municipal parking areas including capacity, and usage.*

Municipal Parking Lots Name/Location	Spaces	Condition	Usage
Town Office			
Hahn Community Building			

- (7) *Identify airports within or adjacent to the community and describe applicable airport zoning and airspace protection ordinances your community has in place.*

There are no airports within Friendship. The Knox County Airport is about 19 miles from the Friendship town line, so development within Friendship would not interfere with that airport's operations or airspace.

*(8) Identify bus or van services.*

Waldo CAP operates transportation services for residents of Knox, Lincoln, and Waldo Counties. They provide Non-Emergency Medical Transportation for MaineCare eligible riders, as well as services for riders who are elderly, have disabilities, and people with low income and transportation for the general public. They currently work with a number of agencies to provide connections to services for mental health, medical care, and adult rehabilitation services. They operate a fleet of agency vehicles that include ADA accessible buses, as well as sedans and vans to provide transportation services. They operate Demand-Response services for riders.

Concord Coach (Trailways) offers daily service on their Maine Coastal Route between Orono and Boston's Logan Airport. Stops include the University of Maine in Orono, Bangor, Searsport, Belfast, Lincolnville, Camden/Rockport, Rockland, Waldoboro, Damariscotta, Wiscasset, Bath, Bowdoin College, Brunswick, and Portland. Waldoboro is the closest stop to Friendship.

The frequency of scheduled bus service is insufficient for most individuals to be able to use on a regular basis, as would be necessary for commuting to work daily. The dispersed location of residents and of workplaces inhibits public transportation to some extent. There are, however, key locations within Friendship, and in other communities, that could benefit from more frequent bus services. These areas include the village. Strategies to address this need are presented at the end of this chapter.

*(9) Identify existing and proposed marine and rail terminals within your community including potential expansions.*

The Town has no marine or rail terminals. None are proposed.

10. *If coastal communities identify public ferry service and private boat transportation support facilities (may be covered under Marine Resources with cross reference) including related water-side (docks/piers/wharves) and land-side (parking) facilities.*

There are no current or proposed public ferry services in Friendship.

## Policies

1. To prioritize community and regional needs associated with safe, efficient, and optimal use of transportation systems.
2. To safely and efficiently preserve or improve the transportation system.
3. To promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.
4. To meet the diverse transportation needs of residents (including children, the elderly and disabled) and through travelers by providing a safe, efficient, and adequate transportation network for all types of users (motor vehicles, pedestrians, bicyclists).
5. To promote fiscal prudence by maximizing the efficiency of the state or state-aid highway network.

## Strategies

Note: Text in blue is supplemental, meant to support the required strategies provided by the State (italicized).

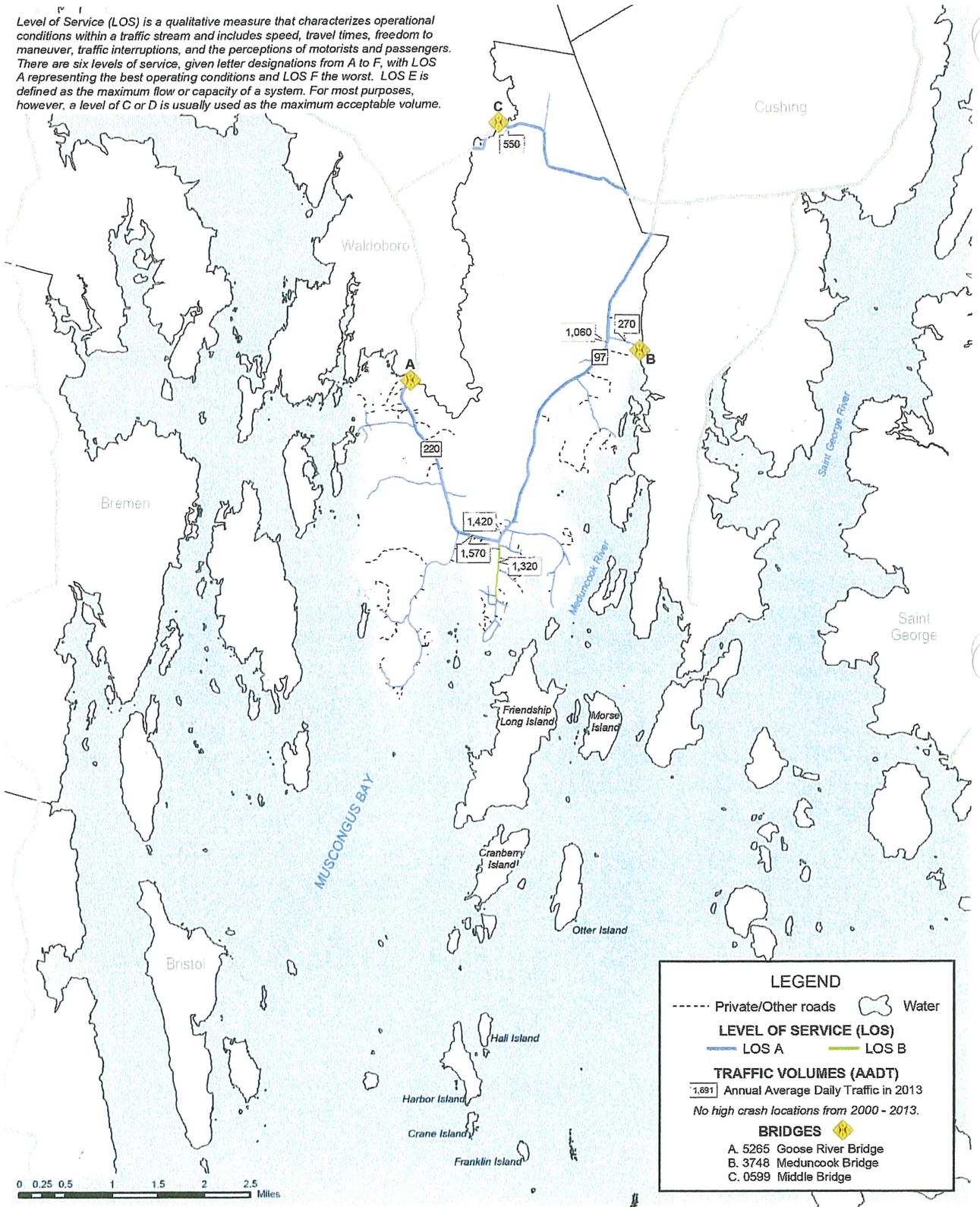
<b>Transportation: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
1. Develop or continue to update a prioritized improvement, maintenance, and repair plan for the community's transportation network.	Selectmen	Immediate and Ongoing
2. Initiate or actively participate in regional and state transportation and land use planning efforts.	Selectmen	Long Term
3. Enact or amend local ordinances as appropriate to address or avoid conflicts with: a) Policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A.73) b) State access management regulations pursuant to 23 M.R.S.A. 704: To maintain and improve traffic flows, and improve safety, future land use ordinance provisions should be in harmony with access management performance standards set in current state regulations for state and state aid roadways. c) State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. 704-A.	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm
4. Enact or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm
5. Work with the Maine DOT as appropriate to address deficiencies in the system or conflicts between local, regional, and state priorities	Selectmen	Immediate and

Transportation: Strategies	Responsible Parties	Timeframe
for the local transportation system.		Ongoing
6. Elderly and Disabled Transit Options: Work with Waldo CAP and other providers to better meet the needs of elderly and disabled residents, who lack their own transportation, by providing carpools, van/jitney, to stores and services in Rockland.	Selectmen	Long Term
7. Pedestrians and Bicycles: To promote pedestrian and bicycle safe options, the Town will welcome opportunities to create multi-use, walking and bicycle paths throughout the Town and especial into interior areas, and sidewalks in the village and other areas. Through public participation the Town will prioritize potential projects, and then seek CDBG infrastructure funds, Maine DOT Enhancement funds, and other sources, to create new paths where best suited, and in agreement with landowners. Public support for these project proposals will be obtained before the Town commits resources.	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm and Ongoing
8. Harbor Access: Retain and improve public access to the harbor. Priorities include the Town Wharf (landing). Apply for Maine DOT Small Harbor Improvement Program (SHIP), funds to rebuild or replace town-owned floats and ramp, and to seek additional parking for the waterfront.	Selectmen, Harbor Committee and Harbor Master	Midterm
9. Parking: Provide additional funding to improve parking facilities and seek additional parking near the village area.	Selectmen, Harbor Committee and Harbor Master	Long Term
10. Impact Fee: Investigate, and implement if warranted, an impact fee system that applies to all new development that affects traffic use of the Town's major road corridors to assist in providing funds to upgrade these roads.	Selectmen and Town Meeting Vote	Long Term

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# TRANSPORTATION NETWORK MAP

Level of Service (LOS) is a qualitative measure that characterizes operational conditions within a traffic stream and includes speed, travel times, freedom to maneuver, traffic interruptions, and the perceptions of motorists and passengers. There are six levels of service, given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS E is defined as the maximum flow or capacity of a system. For most purposes, however, a level of C or D is usually used as the maximum acceptable volume.



Source: Maine DOT, Maine GIS

## WATER RESOURCES

### Introduction

Maintaining water quality is essential for the health of Friendship, its residents, businesses and environment. This chapter describes Friendship's water resources and offers strategies to maintain and enhance them.

### Goal

*To protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers, and coastal areas.*

### Analyses

- (1) *Are there point sources (direct discharges) of pollution in the community? If so, is the community taking steps to eliminate them?*

There are 14 licensed locations with direct discharge into Friendship waterways. See the Marine Resources Chapter for more information including recommended strategies to reduce pollution.

- (2) *Are there non-point sources of pollution? If so, is the community taking steps to eliminate them?*

Runoff from rain falling on impervious surfaces, like buildings and pavement, bare ground and residential lawns is defined as non-point source pollution. Most non-point pollution is residential in nature such as fertilizers and dumping on private land. In such runoff, pollutants occurring naturally like phosphorous, or from petroleum (motor vehicles and storage tanks), fertilizers and pesticides, in addition to untreated or insufficiently treated wastewater and sewage, can be transported into wetlands and waterbodies. Impervious surface percentage maximums, as set in shoreland zoning provisions, can reduce the amount of runoff into waterbodies. In especially sensitive areas, resource protection designations limit or prohibit development. Stormwater best management practices (erosion and sediment control) are found in the shoreland zoning and the subdivision ordinances. It is believed that shoreland zoning and related provisions are effective overall. They promote retention of stormwater on the property to minimize runoff off-site.

- (3) *How are groundwater and surface water supplies and their recharge areas protected?*

The community is aware of possible threats to groundwater, which is the source of the Town's drinking water. Town wide, shoreland zoning provides protection around waterbodies and wetlands limiting impervious surfaces and certain uses within setbacks and districts. An adopted Wellhead Protection Zone (500 feet and 1,000 feet radii around the public water supply drilled wells) helps to protect this source of drinking water from contamination.

The Code Enforcement Officer/Licensed Plumbing Inspector issue permits for subsurface waste/septic systems and drinking water wells following State and local regulations. Additional

protections, like increasing the amount of areas under conservation easements, and/or expanding resource protection zoning should be considered for groundwater protection.

- (4) *Do public works crews and contractors use best management practices to protect water resources in their daily operations (e.g. salt/sand pile maintenance, culvert replacement, street sweeping, public works garage operations)?*

The Town and contractors are aware of the need to use best management practices to protect water resources. The Town realizes that it needs to do more with culvert replacement and storm drainage repairs and replacement, but is currently constrained by budget pressures. The Town is attempting to deal with storm water runoff during the permitting process for new construction as well as trying to manage existing conditions.

- (5) *Are there opportunities to partner with local or regional advocacy groups that promote water resource protection?*

The Town has worked with the Medomak Valley Land Trust in several issues and plans to continue an ongoing relationship with the Knox-Lincoln Soil & Water Conservation District to improve the Town's water resource protection through water quality monitoring, education and conservation efforts.

### **Conditions and Trends**

- (1) *The community's Comprehensive Planning Water Resources Data Set prepared and provided to the community by the Department of Inland Fisheries and Wildlife, the Department of Environmental Protection and the Office, or their designees.*

The data set has been incorporated into the maps titled: Water Resources and Fish Passage Barriers, and in the data that follows.

Maine has four water quality classes of rivers and streams: AA, A, B, and C (Title 38 MRSA Section 465). Each classification assigns designated uses and water quality criteria (narrative and numeric), and may place specific restrictions on certain activities such that the goal conditions of each class may be achieved or maintained. Class AA waters are managed for their outstanding natural ecological, recreational, social, and scenic qualities. Direct discharge of wastewater, dams, and other significant human disturbances are prohibited. Class B waters, including Friendship streams, are general-purpose water and are managed to attain good quality water; aquatic life use goal approximately Tier 3 on the Biological Condition Gradient. Well-treated discharges with ample dilution are allowed.

As of 2014, the Maine Department of Health and Human Services indicated that there is one public water system (PWS) in Friendship as shown in the next table and on the map titled Water Resources. With the exception of this system, which serves 85 users in the village area including the town office, general store, post office, and all other residents depend upon private wells for drinking water. As noted, an adopted Wellhead Protection Zone (500 feet and 1,000 feet radii around the public water supply drilled wells) helps to protect this source of drinking water from contamination.

Friendship Public Water Systems		
Name	ID-Type	Source
Friendship Water Department (Community System) Population served: 85 Facility Status: A System Status: A	ME0092040	200' Bedrock Well - Primary (groundwater)
	ME0092040	414' Bedrock Well - Back-Up (groundwater)

Source: Maine Department of Health and Human Services

- (2) *A description of each great pond, river, surface drinking water supply, and other water bodies of local interest including:*
- a. *ecological value;*
  - b. *threats to water quality or quantity;*
  - c. *documented water quality and/or invasive species problems.*

A great pond is defined in Maine statute as "any inland body of water which in a natural state has a surface area in excess of 10 acres..." Using that definition, there are three identified great ponds in Friendship: Crystal Pond, Forest Pond, Salt Pond (Meduncook River shared with Cushing). There are two major rivers including Goose River (shared with Waldoboro), Meduncook River (shared with Cushing), and several unnamed smaller/intermittent streams. See the maps titled: Water Resources for the locations of these waterways. Note: For Friendship residents, drinking water comes entirely from wells, not from surface waters.

Friendship Ponds			
Name (shared with)	Crystal Pond	Forest Pond	Salt Pond (Meduncook River)
ID	4864	4862	5721
Area (acres)	18	10	44
Perimeter (miles)	0.8	0.6	2.9
Mean Depth (feet)	3	6	N/A
Maximum Depth (feet)	6	8	N/A
Fishery Type	Warmwater	Warmwater	N/A
Invasive Aquatic Infestation	None known	None known	None known
Water Quality	N/A	N/A	N/A
Loons	4 adults -2013	N/A	N/A
Fish species known to be present	Chain pickerel, Largemouth bass	American eel, Brook trout, Golden shiner, Largemouth bass, Minnows, White sucker	Alewife

Sources: Maine Dept. Environmental Protection, Maine Dept. Inland Fisheries & Wildlife

Note: N/A = Not Available

## Fish

This is a list of fish species of greatest conservation need as determined by the Maine Department of Environmental Protection for the region including Friendship.

1. American eel *Anguilla rostrata*
2. Atlantic salmon *Salmo salar*
3. Brook trout *Salvelinus fontinalis*

### Alewife Ponds and Streams-Documented:

Waterbody Name: Salt Pond (Meduncook River)

Status: Active

Stocked: Not Stocked

Harvest: No Commercial Harvest

See the map titled Fish Barriers for the location of this resource.

### Invasive Species

Maine DEP has recorded no invasive species in Friendship.

## **Aquifers**

According to the Maine Geological Survey, there are no areas of significant aquifers in Friendship. A "significant aquifer" is defined as one "capable of yielding 10 gallons or more of ground water per minute to a properly installed well."

## **Wetlands**

Wetlands help to control erosion, store floodwaters, recycle nutrients, filter pollutants, and recharge groundwater. Friendship has several large wetlands and several smaller ones. Wetlands are habitat for fisheries, wildlife and plants. See the map titled Water Resources for the location of Wetlands. See the Natural Resources Chapter for more information on wetland habitats.

## **Stream Crossing Barriers**

Barriers to fish and other aquatic animals occur where roadways cross over streams. The State has analyzed stream crossings on public roads: bridges, struts and culverts. None of these types of barriers was identified for Friendship. Dams can also limit the passage of fish, and measures can be taken to remediate this impact. Three dams have been identified as barriers to aquatic habitat in Friendship: Crystal Pond Dam (D1496), Forest Pond Dam (D1500), and Goose River Dam (Waldoboro town line) (D1503). See the map titled Fish Passage Barriers for the location of barriers and potential barriers in Friendship. Replacing existing culverts and struts with adequately sized ones can improve fish passage and can reduce flooding in adjacent areas. Accordingly resizing should be considered when culverts need replacement. Likewise, dams can be designed to improve habitat movement.

- (3) *A summary of past and present activities to monitor, assess, and/or improve water quality, mitigate sources of pollution, and control or prevent the spread of invasive species.*

The Town, through its ordinances is working on controlling stormwater runoff. The Town is also working cooperatively with private owners to manage stormwater runoff through improvements to drainage systems. Monitoring of waterbodies has previously taken place through the efforts of state and regional conservation groups.

- (4) *A description of the location and nature of significant threats to aquifer drinking water supplies.*

A threat to water quality is non-point source pollution, primarily stormwater runoff. As mentioned, town ordinances have partially addressed this issue. The town may want to consider other measures such as implementing low impact development techniques that focus on catching stormwater before it leaves individual properties. Another potential threat to water quality is from individual septic systems that fail. The Code Enforcement Officer reports five known failed septic systems in the past six years. The Town issues notices of violation and can provide assistance with remediation for low-income individuals.

- (5) *A summary of existing lake, pond, river, stream, and drinking water protection and preservation measures, including local ordinances.*

Municipal shoreland zoning provisions protect water quality in the shoreland zone along streams, ponds and wetlands. An adopted Wellhead Protection Zone (500 feet and 1,000 feet radii around the public water supply drilled wells) helps to protect this source of drinking water from contamination through standards that regulate uses. See the Land Use Chapter for more information.

Best Management Practices are required for development activities during and after construction, and for timber harvesting related to erosion and sediment control to protect waterbodies.

State and federal laws that protect water resources are summarized below. Enforcement of these laws by State agencies can be limited due to agency staffing levels. Compliance with most State and federal environmental regulations is often left to individual landowners. Some of the most significant State laws affecting water resources, and other natural resources, include the following:

- Maine Erosion and Sedimentation Control Law – requires basic controls and stabilization when a project involves filling, displacing, or exposing earthen material. No permit is required, but the law sets minimum across-the-board standards that help prevent harm to surface waters.
- Maine Forest Practices Act – requires that landowners notify the Maine Bureau of Forestry of any commercial timber harvesting activities, and that commercial harvest activities meet specific standards for timber harvesting adjacent to waterbodies, clearcutting and forest regeneration following the timber harvest. If harvesting activities result in a clear-cut larger than five acres, there must be a separation zone between clearcuts, and regeneration standards must be met. This rule requires a harvest management plan developed by a licensed forester for clearcuts greater than 20 acres. The rules prohibit clearcuts greater than 250 acres.
  - Maine Natural Resource Protection Act (NRPA) – regulates activities in, on, over or adjacent to natural resources, such as lakes, wetlands, streams, rivers, fragile mountain areas, high and moderate value waterfowl and wading bird habitats, shorebird areas, high and moderate value deer wintering areas, significant vernal pools, and sand dune systems. Standards focus on the possible impacts to the resources and to existing uses.
- Maine Plumbing Code – rules pertain to materials, fixtures, vent and waste piping potable water supply piping, and approved subsurface wastewater disposal (septic) systems necessary to protect the public health, safety, and welfare of the citizens of Maine.
- Maine Site Location of Development Law (Site Law) – regulates developments that may have a substantial impact on the environment (i.e., large subdivisions and/or structures, 20-acre-plus developments, and metallic mineral mining operations). Standards address a range of environmental impacts.
- Maine Storm Water Management Law – regulates activities creating impervious or disturbed areas (of size and location) because of their potential impacts to water quality.

In effect, this law extends storm water standards to smaller-than Site Location of Development Law-sized projects. It requires quantity standards for storm water to be met in some areas, and both quantity and quality standards to be met in others.

**Policies**

- (1) *To protect current and potential drinking water sources.*
- (2) *To protect significant surface water resources from pollution and improve water quality where needed.*
- (3) *To protect water resources in growth areas while promoting more intensive development in those areas.*
- (4) *To minimize pollution discharges through the monitoring of existing septic system & education of the public.*
- (5) *To cooperate with neighboring communities and regional/local advocacy groups to protect water resources.*

**Strategies**

<b>Water Resources: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<p>(1) <i>Adopt or amend local land use ordinances as applicable to incorporate storm water runoff performance standards consistent with:</i></p> <ul style="list-style-type: none"> <li>a. <i>Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502).</i></li> <li>b. <i>Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds.</i></li> <li>c. <i>Maine Pollution Discharge Elimination System Stormwater Program</i></li> <li>d. <i>Amend regulations for construction and development, which better protect against runoff on adjoining lands and roads.</i></li> </ul>	Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote	Midterm
<p>(2) <i>Consider amending local land use ordinances, as applicable, to incorporate low impact development standards.</i></p>	Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote	Midterm
<p>(3) <i>Where applicable, develop an urban impaired stream watershed management or mitigation plan that will promote continued development or redevelopment without further stream degradation.</i></p>	NA	
<p>(4) <i>Maintain, enact or amend public wellhead and aquifer recharge area protection mechanisms, as necessary.</i></p>	Selectmen, Planning Board, Code	Long Term and

Water Resources: Strategies	Responsible Parties	Timeframe
	Enforcement Officer, and Town Meeting Vote	Ongoing
(5) The Town will continue to <i>encourage landowners to protect water quality</i> . Friendship provides <i>local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine.</i>	Selectmen, Planning Board and Code Enforcement Officer	Immediate and Ongoing
(6) The Town will continue to <i>adopt water quality protection practices and standards for construction and maintenance of public and private roads and public properties and requires their implementation by contractors, owners, and community officials and employees.</i>	Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote	Immediate and Ongoing
(7) The Town will continue to <i>participate in local and regional efforts to monitor, protect and, where warranted, improve water quality.</i>	Selectmen, Maine DEP, Conservation District, University of Maine	Midterm
(8) The Town will <i>provide educational materials at appropriate locations regarding aquatic invasive species.</i>	Town Clerk, Code Enforcement Officer	Ongoing
(9) The Town will establish a revolving loan fund to assist low income residents to replace failing septic systems.	Selectmen and Town Meeting Vote	Ongoing
(10) The Town will evaluate the replacement of potentially substandard culverts that are subject to flooding and that might limit the movement of aquatic habitat. Dependent upon funding availability, the Town will seek to install stream smart crossings where appropriate to reduce flooding and improve habitats, and consider improvements to existing dams to facilitate the movement of aquatic habitat.	Selectmen, Maine DEP	Long Term

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# Water Resources

**LEGEND**

- State roads
- Town roads
- - - Private/Other roads
- ▭ Dam
- ▭ Drainage Divides
- Public Water Supply
- ▲ Overboard Discharges

**WATER QUALITY CLASSIFICATION**

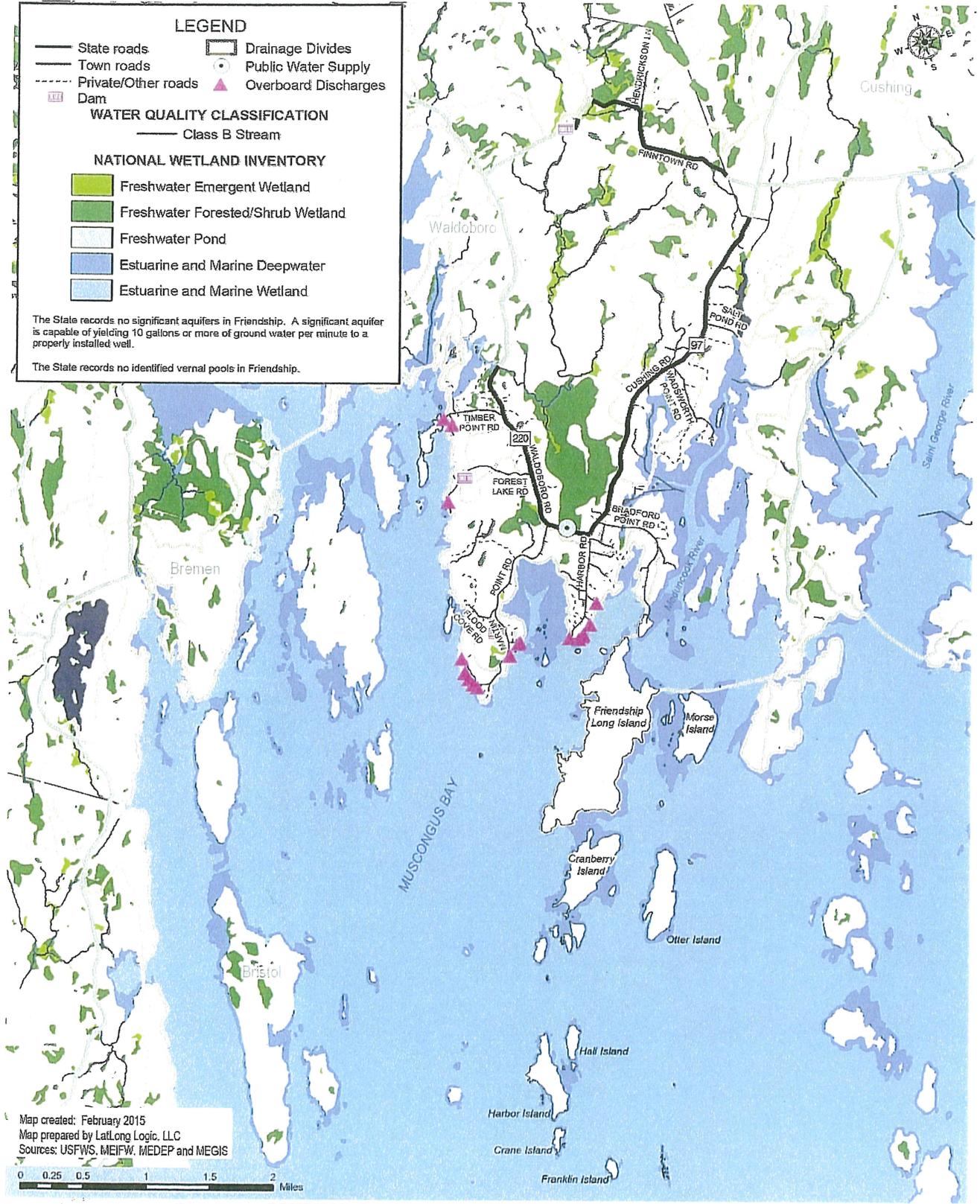
- Class B Stream

**NATIONAL WETLAND INVENTORY**

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

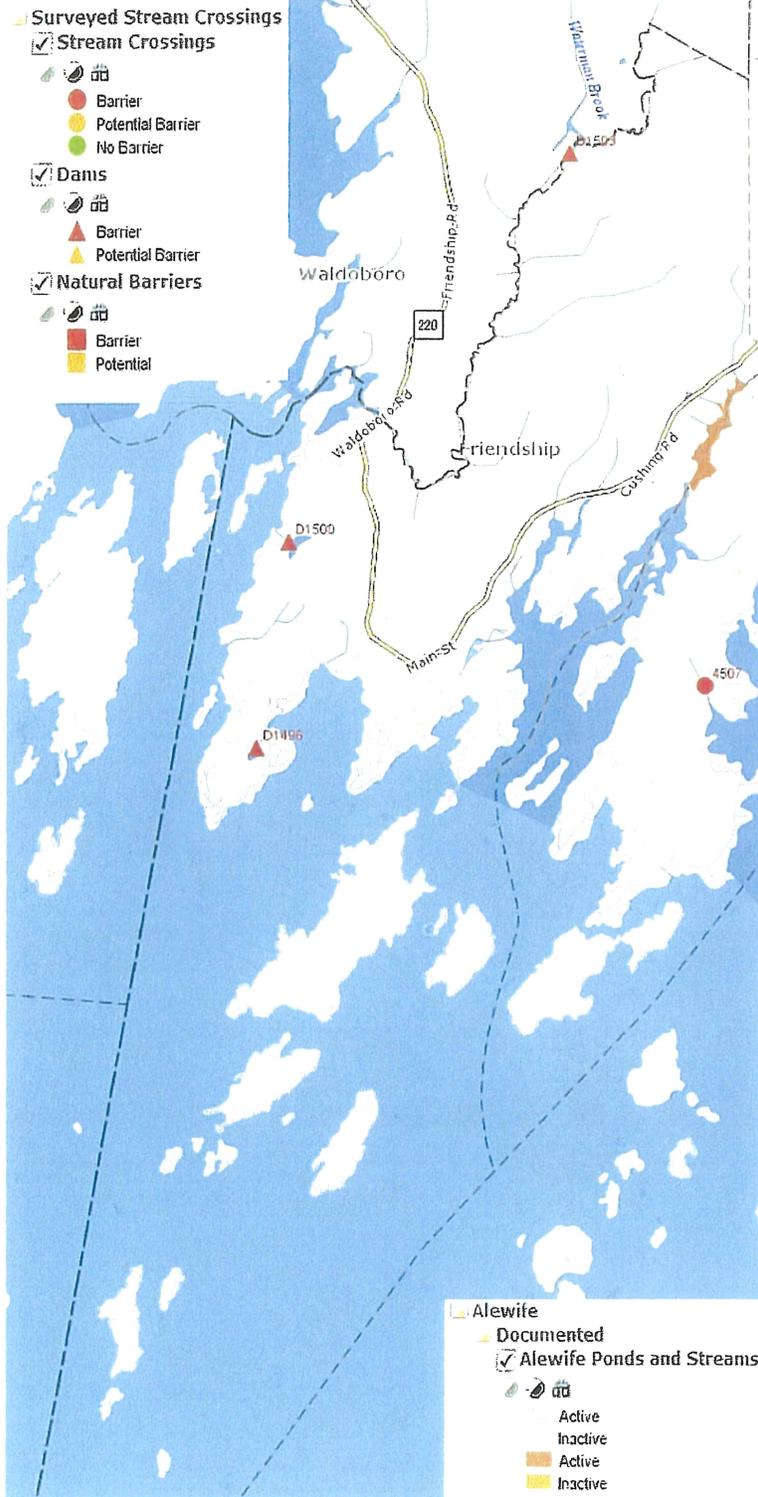
The State records no significant aquifers in Friendship. A significant aquifer is capable of yielding 10 gallons or more of ground water per minute to a properly installed well.

The State records no identified vernal pools in Friendship.



Sources: USFWS, Maine DIFW, Maine DEP and Maine GIS

### Fish Passage Barriers



Source: Maine DACF, 2014